DOCUMENT RESUME

ED 124 257 JC 760 338

AUTHOR	Lee, Owen M., Jr.
TITLE	The Development of a Model for the Management of a Student-Centered Program at a Community College Utilizing Human Potential Seminars, Cognitive Style Mapping, and Career Planning.
PUB DATE	75
NOTE	185p.; Ed. D. Dissertation, Nova University
EDRS PRICE	MF-$0.83 HC-$10.03 Plus Postage.
DESCRIPTORS	Career Planning; Community Colleges; Curriculum Design; *Junior Colleges; Literature Reviews; *Models; Organization; Personal Growth; *Program Administration; *Remedial Programs; Self Concept; Student Centered Curriculum; *Student Motivation
IDENTIFIERS	*Cognitive Style Mapping; Polk Community College

ABSTRACT

Based on the example of the experimental We Weigh and Achieve to Gain Success (WACS) program at Polk Community College which is designed to deal with unmotivated, undecided, and unprepared students, this study develops a model for implementing a student-centered remedial program at the community college level. The model outlines procedures to follow in program development, staffing, organization, implementation, supervision, and evaluation. Basically, what results is an interdisciplinary course employing three techniques: (1) human potential seminar (a structured small group experience founded on the assumption that something is right with the participant); (2) cognitive style mapping (a diagnostic battery which determines how a student takes notice of his total surrounding, how he searches for meaning, and how he contrasts or relates information); (3) career planning. This model program is intended to improve the student's self-concept, and motivate him to achieve a definable objective. A review of the literature establishes the need for such a program, and the validity of the psychological and educational approaches employed in developing the model. (NHM)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED124257

The Development of a Model for the Management of a Student-Centered Program at a Community College Utilizing Human Potential Seminars, Cognitive Style Mapping, and Career Planning

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

OWEN M. LEE, JR.

A MAJOR APPLIED RESEARCH PROJECT
PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

1975

JC 260 338

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Owen M. Lee, Jr.
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

Copyright by Owen M. Lee, Jr., 1975.

All rights reserved, including the right
of reproduction in whole or in part in any form.

ACKNOWLEDGMENTS

To all who have assisted with this study, the writer expresses his deep appreciation and profound gratitude. Dr. Dale Tillery, MRP Advisor; Dr. Valda Robinson, Cluster Coordinator, and Dr. Ross Moreton, Nova Central Staff Member, are due much of the credit for the success of this study because of their support and assistance in planning.

A special debt of gratitude is also due Mrs. Ginger Allsopp, Mrs. Helen Kerr, and Ms. Nena Frost, members of the Polk Community College WAGS Committee, for their critical readings of the manuscript.

The writer is deeply grateful to Mrs. Dorothy White, Mrs. Pam Davidson, and Mrs. Ruth Lee for assistance in typing the manuscript.

Additional expressions of appreciation are in order for Dean William Taylor of Polk Community College for his suggestions and sympathy; to Dr. Joseph E. Hill and Dr. Derek N. Nunney for their assistance in providing information on cognitive mapping; and to Dr. James D. McHolland and Dr. Roy W. Trueblood for providing materials and suggestions on the Human Potential Seminar Process.

To my children, Rhonda and Travis, goes my thanks for their patience and understanding during the last three years.

Finally, to my wife, Ruth, a personal acknowledgment of my everlasting love and gratitude for her encouragement and support throughout my doctoral program.

TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS iii

LIST OF FIGURES ix

ABSTRACT x

Chapter

1. INTRODUCTION 1
    STATEMENT OF PURPOSE 5
    STATEMENT OF MAJOR ISSUES 6
    IMPLICATIONS AND SIGNIFICANCE 7
    DEFINITIONS OF KEY TERMS 9
    METHOD AND PROCEDURES 11
2. BACKGROUND OF THE STUDY 13
    REVIEW OF LITERATURE 20
        Administrative Leadership 20
        Self-Concept 23
        Learning 27
            Stimulus-response 30
            Reinforcement 31
            Feedback 31
            Conditioning 32
            Respondent conditioning 32
            Operant conditioning 32
            Extinction 32

Chapter Page

Shaping 33

Individualized Instruction 33

Remediation 39

Career Planning 43

UNDERGIRDING THEORIES 46

Human Potential Seminar 47

Undergirding concepts and theories 47

Human potential seminar philosophy 49

Analysis of human potential seminar process 50

Personalized Educational Programs 56

Symbols and their meanings 62

Cultural determinants 62

Modalities of inference 63

3. ADMINISTRATIVE MANAGEMENT MODEL 65

DEVELOPMENT 66

Program Objectives 68

Advisory Committee 70

Planning 72

Interdisciplinary course 74

Supporting courses 74

Staff selection 75

Resources 76

Career information center 76

Costs 77

Evaluation 78

STAFFING 79

Chapter Page

Staff Selection 80

Staff Training 83

Consultants 83

Workshops 83

Inservice training 84

ORGANIZATION 85

Student Selection 87

Experimental group 87

Control group 88

Scheduling 89

Courses 89

Students 90

H. P. sessions 90

Instruction 91

Instructional resources 91

Instructional procedures 92

Career Information Center 93

Library materials 94

Audio-visual materials 95

IMPLEMENTATION 96

Guidelines 96

Student Orientation 98

Testing 98

Educational sciences 98

H. P. seminars 99

Career planning 100

Chapter Page

Human Potential Seminar Sessions 100

Personal Educational Prescriptions 100

Diagnosis 100

Prescription development 101

Bursting 102

Career Counseling Sessions 102

SUPERVISION 104

Management By Committee 104

Committee Responsibilities 106

Committee Meetings 107

EVALUATION 108

Perspectives 110

Parameters 111

Processes 112

Results 114

4. CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS 116

CONCLUSIONS 116

RECOMMENDATIONS 119

Program Justification 119

Committee Organization 119

Staff Specifications 120

Staff Edification 121

Student Consideration 122

Management Inspiration 123

Evaluation Articulation 123

IMPLICATIONS 125

Page

APPENDIXES 129

A. COGNITIVE STYLE MAP 130

B. COGNITIVE STYLE MAPPING GLOSSARY 131

C. PROPOSAL F[illegible] INTERDISCIPLINARY COURSE 135

D. SUPPORTING COURSES IN THE PCC WAGS PROGRAM 137

E. SOURCES OF CONSULTANTS AND WORKSHOPS 139

F. EDUCATIONAL SCIENCES WORKSHOP 140

G. COGNITIVE STYLE MAPPING WORKSHOP 145

H. INSERVICE TRAINING SESSIONS 147

I. STUDENT INVITATION TO JOIN PCC WAGS PROGRAM 148

J. STUDENT DATA SHEET 149

K. COURSE SCHEDULE 150

L. HUMAN POTENTIAL SEMINAR SCHEDULE 151

M. IDS 101 COURSE SCHEDULE 153

N. IDS 101 SYLLABUS 154

O. WAGS TESTING SCHEDULE 159

P. PRESCRIPTION ACTIVITIES 160

Q. STUDENT EVALUATION QUESTIONNAIRE 161

BIBLIOGRAPHY 163

AUTOBIOGRAPHICAL SKETCH 171

SIGNATURE PAGE 172

LIST OF FIGURES

Figure Page

1. Student-Centered Program Model 67
2. Development Component 69
3. Staffing Component 81
4. Organization Component 86
5. Implementation Component 97
6. Supervision Component 105
7. Evaluation Component 109

ABSTRACT

Statement of Purpose

The purpose of this study was to develop strategies and administrative procedures for the management of a student-centered program based on the evolution of an experimental program at Polk Community College.

Specifically the study focused on a model which a community college administrator could utilize in installing a student-centered program. This model includes procedures to follow in program development, staffing, organization, implementation, supervision, and evaluation.

Statement of Major Issues

The student-centered model provides community college administrators with a program designed to cope with the unmotivated, undecided, and unprepared student who typically enrolls at open-door institutions. Basically the three main problems faced by these students are: (1) most students experiencing difficulty in college have in common a poor self-image, or at least an inaccurate self-concept, (2) students learn at different rates, but also in different ways, and (3) a large percentage of enrolling freshmen at community colleges are undecided, confused, and frustrated about the occupation they plan to follow.

The student-centered model employs three techniques, incorporated in an interdisciplinary course, which complement each

other and appear to be effective in dealing with these problems faced by unmotivated, undecided, and unprepared students. They are (1) the Human Potential Seminar, (2) cognitive style mapping, and (3) career planning.

Administrative strategies and procedures included in the model encourage administrators to strengthen their role as leaders and change agents.

Implications and Significance

The student-centered program described in this study, along with the administrative strategies and procedures for its design and management, has significance for all open-door institutions. The administrator who effectively installs this model should not only influence student success, but may serve as a change agent by encouraging staff members to look for alternative instructional approaches.

This study will provide the administrator with the knowledge and facility to initiate educational change by guiding his staff in a manner to release their potential, by developing a climate for innovation, and by providing the required undergirding concepts to bring about this change. The model should provide a systematic procedure which minimizes installation problems often experienced when attempting to bring about programmatic change.

Futhermore, this student-centered program has implications at all levels of education and might well be included in preservice and inservice teacher education programs.

Method and Procedures

The first step in developing the student-centered program was an extensive review of current literature. This search was undertaken for two purposes. First, to provide information relative to similar studies, to assimilate additional knowledge on appropriate concepts, and to analyze undergirding theories on which the program was based. The second purpose was to provide the administrator with up-to-date information on national trends and innovative programs.

Development of the student-centered program was accomplished by specifically outlining the administrative strategies and procedures necessary for the development, staffing, organization, implementation, supervision, and evaluation of the program. The model was based on knowledge gained from the literature research and experiences associated with the Polk Community College WAGS Program.

The WAGS Program, which evolved from an attempt to meet student needs, provided a foundation for the student-centered model which appears to be educationally sound.

Conclusions

Pressures are being placed on community college administrators because of rapid growth and changing times. Today the community college administrator must be an effective leader, change agent, and manager. However, for colleges to be efficient and successful, students must succeed.

After examining numerous factors that affect learning and academic success, the phenomenon of individual differences appears to be an important key along with self-concept and long-range planning.

The student-centered program model employs the individualized approach and the evidence available from the experimental program at Polk Community College indicates that it promotes success. The individualized approach, utilizing cognitive style mapping, coupled with the Human Potential Seminars and career counseling, contribute to the total growth of the student.

The obvious conclusion is that the student-centered program, which has evolved from a long-term systematic endeavor, is based on sound psychological and educational concepts. Therefore, the model outlined by this study can assist community colleges and their administrators in being efficient and successful through student success.

Chapter 1

INTRODUCTION

During a decade of service, Polk Community College, Winter Haven, Florida, like many other institutions, has searched for ways to help students learn more in less time, achieve academic success, and formulate goals for their future aspirations. During these ten years of existence the College has continually experimented to develop courses and programs to meet student needs. Administrators at PCC have shown a willingness for educational experimentation and, at the same time, a strengthening of educational philosophy and method.

In general the Carnegie Commission endorsed this approach when they reported that the community college is full of promise and offers opportunities to more Americans in more areas and of more ages than any other segment of higher education. The Commission concluded that community colleges offer young persons and adults an opportunity to start an academic career, to increase occupational skills, to enrich the quality of their lives, and generally to multiply their educational options.[1]

Curiously enough the community colleges, in attempting to meet these needs, significantly approach Maslow's concept of an ideal college. He visualizes the ideal college as one which provides the student an opportunity to find himself, a place to find out what he wants and an opportunity to find what skills he possesses. He perceives the ideal college as a place where people can take various subjects, attend various seminars, and move toward the discovery of a vocation. In other words the chief goals are the discovery of identity and the discovery of vocation.[2]

---

[1] Carnegie Foundation for the Advancement of Teaching, Commission on Higher Education, The Open-Door Colleges: Policies for Community Colleges, special report (New York: McGraw-Hill Book Co., 1970), p. 51.

As community college administrators study the needs of the community and attempt to build programs for students based on these needs, perhaps Maslow's concept should be tempered with Bruner's philosophy. He advocates that we will have a better chance of surviving as a democracy if all students are assisted in achieving their optimum intellectual level.[3]

As Henderson puts it, educational problems of the individual and society relate specifically to the problem of higher education. He outlines two phases to the student's problem which reinforces what others have found. One phase involves defining the career for which the student should prepare, and the other phase includes the student preparing himself for other aspects of his life including his use of leisure time, his family life, his work within his community, and his responsibility as a member of organized society.[4]

---

[2] Abraham H. Maslow, The Farther Reaches of Human Nature (New York: The Viking Press, 1971), p. 183.

[3] Jerome S. Bruner, The Process of Education (Cambridge: Harvard University Press, 1962), pp. 9-10.

[4] Algo D. Henderson, The Innovative Spirit (San Francisco: Jossey-Bass, Inc., Publishers, 1970), p. 6.

By and large, Burns agrees and contends that serious attention be focused on the needs of the individual student. He feels that particular attention should be given to student goals and aspirations, his cultural and educational background, and his interests and learning style. He concludes that these requirements demand that new materials, processes and arrangements be developed and implemented which do more than touch the periphery of the production component of the educational organization.[5]

This places a tremendous burden on the community college administrator. As a leader he already spends much of his time keeping people satisfied and motivated while making sure that the work of the organization gets done. Now it appears that he must become more aggressive as a change agent to see that his college implements ideas which, for the most part, everyone agrees should be a function of the community college. This task is not an easy one for the administrator. Students fail to understand the importance and significance of programs designed for them, and many lack the motivation and stamina required to achieve success. Teachers are basically reluctant to try new ideas yet they are responsible for implementing any changes the administrator may attempt to make.

The problem facing community college administrators was pointed out by Houle when he stated that the desire and ability to learn are not shared equally by everyone. However, he argued that the desire and ability to learn can be fostered by good teaching, by careful guidance, by building and enlarging sympathetic enclaves, and by providing a range of educational opportunities.[6] Medsker and Tillery support Houle when they acknowledge that the community college should play an important role in providing opportunity for all who wish to continue their education. They further point out that this naturally has implications for the curriculum, instruction, student personnel services, physical facilities, and a host of other related matters with which the community college must be concerned.[7]

---

[5] Richard W. Burns and Gary D. Brooks, eds., Curriculum Design in a Changing Society (Englewood Cliffs: Educational Technology Publications, 1970), p. 341.

This study was an attempt to aid the community college administrator in meeting the challenge facing him and was based on the premise that new directions in education are necessary, that changes in education will require innovations, and that the typical ways in which educators and colleges operate will have to be altered. It was not the purpose of this study to deal with all the problems facing community college administrators. The study was specifically concerned with the community college student who is unmotivated, undecided, and unprepared.

This chapter is divided into five sections. These entail: (1) statement of purpose, (2) statement of major issues, (3) implications and significance, (4) definitions of key terms, and (5) method and procedures.

---

[6] Cyril O. Houle, The Inquiring Mind (Madison: The University of Wisconsin Press, 1961), p. 82.

[7] Leland L. Medsker and Dale Tillery, Breaking the Access Barriers: A Profile of Two-Year Colleges (New York: McGraw-Hill Book Co., 1971), p. 51.

STATEMENT OF PURPOSE

The purpose of this study was to develop strategies and administrative procedures for the management of a student-centered program based on the evolution of an experimental program at Polk Community College. The PCC program is titled WAGS which stands for we Weigh and Achieve to Gain Success.

Specifically the study focused on the process by which the experimental program was developed, staffed, organized, implemented, supervised, and evaluated.

To be more specific the study was designed to be helpful to administrators in the following ways:

1. By providing the administrator with an orientation to the dilemma faced by open-door institutions admitting freshmen who are unmotivated, undecided, and unprepared.

2. By providing background history of what has transpired at Polk Community College to serve as a checklist of what to avoid when implementing programs for freshmen needing special attention.

3. By including a search of the current literature and a discussion of existing innovative programs, trends in remediation, learning theories, and curriculum management which will save the busy administrator considerable time.

4. By discussing an administrator's role in curriculum management to emphasize his responsibility of leadership and his function as a change agent.

5. By providing a model which would enable an administrator to develop and manage a student-centered program designed for freshmen with specific educational needs.

STATEMENT OF MAJOR ISSUES

Tillery believes that the functions of the community college are educationally sound and in the service of important national goals. He further contends that inadequate financial resources, lack of state and local planning, and shortages of qualified faculty and administrators constitute barriers to the full development of this essential component of higher education.[8] It was the intent of this study to aid in this future development of the community college by providing the community college administrator with a guide that served two main purposes.

First, it would provide the academic dean, division chairman, or department head with a program that could relieve the administrative dilemma of how to cope with unmotivated, undecided, and unprepared students. The unique feature of this student-centered program is the IDS 101 course. It contains three components which complement each other but have never been joined together in a course. They are (1) the Human Potential Seminar, (2) cognitive style mapping, and (3) career planning. This course has special significance for the administrator concerned with the future development of the community college because it focuses upon three problems facing administrators nationwide. These problems are:

1. Most students experiencing difficulty in college have in common a poor self-image, or at least an inaccurate self-concept.

---

[8] Dale Tillery, "A College for Everyman," (Ft. Lauderdale: Nova National Ed.D. Program, Junior College Governance, 1973), p. 20. (Mimeographed.)

They do not know why they are in college, where they want to go, or how to get there. These students also have a lack of confidence and an undeveloped set of life goals.

2. Students learn at different rates, but also in different ways. They have different learning styles. Some prefer an individualized study system, some the lecture system, some learn faster with visuals, tapes, or other forms of media. However, most students are usually unaware of their preferences.

3. A large percentage of enrolling freshmen at community colleges are undecided, confused, and frustrated about the occupation they plan to follow. Approximately fifty percent of entering freshmen at PCC indicate that they are undecided and elect to follow a general program.

The second main purpose of this study was to provide the administrator with strategies and procedures for staffing, organizing, implementing, supervising, and evaluating the student-centered program. These administrative guidelines will enable the administrator, who desires to be a change agent in the future development of the community college, to follow Tillery's recommendation for replacing traditional programs of remediation which depress students and teachers alike with programs which invite success.[9]

IMPLICATIONS AND SIGNIFICANCE

America today is engaged in a great debate relative to the handling of the unmotivated, undecided, and unprepared college freshman. Tillery reveals that a majority of students now in community colleges have deficiencies in skills which are necessary for college work. He maintains that new and systematic programs in remediation are required.[10]

---

[9] Ibid., p. 24

It is reported by Medsker and Tillery that approximately one-third of the students entering a community college find themselves in limbo and soon on their way out of college. This occurs because they are placed in programs they can not handle; they are turned off by instruction which is irrelevant to their interests; and some are overwhelmed by financial pressures. It is suggested that a lack of program comprehensiveness, when combined with deficiencies in guidance and developmental education, means that many students find no programs which offer opportunities for them.[11]

The WAGS Program at PCC was developed to aid administrators in coping with this growing problem. Therefore, the student-centered program described in this study, along with the administrative strategies and procedures for its design and management, has significance for all open-door institutions.

Academic deans, division chairmen, and departmental heads concerned with administering effective programs should find this study significant. It is assumed that the administrator who effectively implements this program will not only influence student success but will serve as a change agent by encouraging faculty members to look for alternative instructional approaches.

---

[10] Ibid., p. 24.

[11] Medsker and Tillery, op. cit., p. 140.

The model produced by this study (which includes administrative strategies and procedures necessary for the development, staffing, organization, implementation, supervision, and evaluation of the student-centered program) should represent a significant contribution to other community colleges and community college administrators facing similar problems.

This study could also have implications for additional research, admission policies, recruiting, counseling, advising, remediation, future programs and other administrative challenges facing administrators of open-door institutions.

DEFINITIONS OF KEY TERMS

The following general definitions are used in this study. Additional definitions can be found in the appendixes.

Change Agent:	One who facilitates planned change or innovation.
Cognitive Style Mapping:	A cognitive style map gives a picture of the way a student derives meaning from his environment and personal experience. A student's cognitive style is ascertained through a diagnostic battery which determines how he takes notice of his total surroundings, how he searches for meaning, and how he contrasts or relates information.[12]

---

[12] Joseph E. Hill, The Educational Sciences (Bloomfield Hills: Oakland Community College Press, 1974), p. 3.

Human Potential Seminar:	A structured small group experience founded on the assumption that something is right with the participant.[13]
Individualized Instruction:	A design that makes it possible for a student at any time to be engaged in learning in a manner which is appropriate for him. This differs from independent study, although independent study is often a part of individualized instruction.
Personalized Educational Programs:	An effort to break the lock step tradition in education by designing an individualized approach for each student through an educational prescription based on the student's strengths as shown on his cognitive style map.[14]
Self-Concept:	The concept that an individual has of himself. The view each person holds of himself along with the belief in his strength and ability.
Strategy:	A plan of action designed to bring about positive results.
Systems Approach:	A systematic approach to instruction which encompasses the teaching of facts, along with development of attitudes and values, through an unlimited array of teaching and learning situations.

---

[13] James D. McHolland, Human Potential Seminars: Leader's Manual (Evanston: Kendall College Press, 1972), p. 1.

[14] Derek N. Nunney and Joseph E. Hill, "Personalized Educational Program" (unpublished manuscript, Oakland Community College, 1974), p.1.

WAGS: An acronym for the program we Weigh and Achieve to Gain Success.

METHOD AND PROCEDURES

The first step in developing the student-centered program was an extensive review of current literature. This search was undertaken for two purposes. First, to provide information relative to similar studies, to assimilate additional knowledge on appropriate concepts, and to analyze undergirding theories on which the program is based. The second purpose was to provide the administrator with up-to-date information on national trends and innovative programs. The review of the literature and undergirding theories will be found in Chapter 2.

Development of the student-centered program was accomplished by specifically outlining the administrative strategies and procedures necessary for the development, staffing, organization, implementation, supervision, and evaluation of the program. The model was based on knowledge gained from the literature research and experiences associated with the Polk Community College WAGS Program.

The WAGS Program at PCC provided a sturdy foundation for the student-centered program model. Specifically the experimental program development employed an administrative management technique utilizing the problem-solving approach. This technique was chosen because it incorporates group participation and involves the application of the scientific method of analysis and synthesis. Henderson describes the problem-solving technique as one including a methodology for identifying problems, for describing factors that bear upon a particular problem, for collecting needed data, for analyzing the facts, for arriving at potential solutions and for choosing the solution that seems best.[15]

Bushnell endorses the problem-solving technique and advocates that the combination of the systematic problem-solving technique with participative management makes it possible to continue a commitment to humanistic goals while improving the productivity of our colleges.[16]

The study also utilized planning models described by Tuckman[17] and Henderson.[18] Both models provide for methods of analysis, synthesis, operation, and feedback which are essential in effectively designing and managing an instructional program. The student-centered model developed by this study will be outlined in Chapter 3.

Finally, conclusions, recommendations, and implications will be presented in Chapter 4 to aid the administrator in installing the student-centered program.

---

[15] Henderson, op. cit., p. 230.

[16] David S. Bushnell, Organizing for Change: New Priorities for Community College (New York: McGraw-Hill Book Co., 1973), p. 83.

[17] Bruce W. Tuckman and Keith J. Edwards, "A Systems Model for Instructional Design and Management," Educational Technology, 11:21-26, September, 1971.

[18] Henderson, op. cit., pp. 173-181.

Chapter 2

BACKGROUND OF THE STUDY

This chapter presents the background of the study, a review of the literature encompassing all facets of the student-centered program, and the undergirding theories of the two major techniques employed in the program.

According to Medsker and Tillery the public community college attracts students from almost all levels of academic ability, achievement, family background, and motivation.[1] In their study it was recognized that, for the most part, two-year students, as compared with four-year students, represent a much wider range of ability and achievement, come from homes lower in the socioeconomic scale, are less likely to be motivated for college work, and are more likely to be employed while attending college.[2]

These findings describe precisely the situation at Polk Community College and bring in focus the dilemma facing administrators at PCC as well as those all over the nation. For some reason community colleges have been unable to adequately meet the needs of the diverse student population generated by an open-door policy. Perhaps administrators have neglected their roles as change agents. Perhaps Phillips was right to a degree when he concluded that college and university administrators have been forced to give most of their time and thought to business and financial management in order to justify funds for expansion from legislation and private donors.[3]

---

[1] Leland L. Medsker and Dale Tillery, Breaking the Access Barriers: A Profile of Two-Year Colleges (New York: McGraw-Hill Book Co., 1971), p. 37.

[2] Ibid., p. 42.

These additional responsibilities which have been thrust upon college and university administrators could possibly serve as a barrier to innovation in education. As Phillips contends, what is needed is clearer recognition of the importance of the role of the administrator and greater attention to his recruitment and on-the-job betterment.[4]

The dynamic administrator will spend untold hours working to change his institution by looking for better ways to do things, for new solutions to existing problems, and perhaps even more importantly, for problems which should concern him and his staff. Woods maintains that the administrator must be a change agent, the one who provides the stimulus for change, the one who gets things started. He describes this person as one who uses knowledge, information, or ideas from some source (usually outside the system) to start other individuals on the process of adopting new ideas, new programs, or new ways of doing things.[5]

To adequately design and manage the student-centered program as described in this study the administrator must fully recognize his role as a manager, leader, and change agent. It is the philosophy of the administration at PCC to utilize faculty members who possess innovative characteristics to work with experimental programs. This administrative technique allow ideas to be tested, discarded, accepted, or modified prior to involving faculty members less willing to experiment.

---

[3] Ellis L. Phillips, Jr., "Toward More Effective Administration in Higher Education," The Educational Record, 47:149, Spring, 1966.

[4] Ibid., p. 162.

[5] Thomas E. Woods, The Administration of Educational Innovation, U.S., Educational Resources Information Center, ERIC Document ED 043 314, May, 1967, p. 34.

The structuring of programs at PCC is approached scientifically. An attempt is made to analyze what the student needs to accomplish while enrolled, and what he should be able to do when he graduates. Despite the fact that PCC has attempted to meet student needs with various programs, administrators have experienced somewhat frustrating results. The evidence suggests that the task of analyzing diverse and individual student needs and then of meeting those needs is easier said than done. Wattenbarger has pointed out that this great diversity of need emphasizes that the institutional objectives of community colleges must vary considerably from institution to institution.[6]

Terry O'Banion states that if the community college is to be truly the people's college, it must provide its increasingly diverse student population with meaningful learning experiences. He maintains that lock step scheduling, instruction primarily by the lecture method, ill-defined and poorly evaluated instructional objectives, and ineffective student personnel programs are being gradually abandoned in favor of new goals and new approaches. He concludes that community college educators are breaking down outmoded interdisciplinary boundaries utilizing the new technology of the systems approach, retooling grading practices, and setting specific educational objectives toward which students can move at their own pace.[7]

---

[6] James L. Wattenbarger, "Community College Curriculum: Establishing and Implementing Institutional Objective," Peabody Journal of Education, 51:107, January, 1974.

The need for a program such as the student-centered program proposed in this study can best be illustrated by looking at the history of PCC relative to the evolution of special programs to help students with special problems. It is interesting to note that PCC has continuously experimented in an effort to find better ways of implementing the open-door philosophy. For the most part, this was an attempt to improve instruction in order to meet the needs of a constantly growing and changing student body.

During the last eight years those in administrative positions, working as a team with instructors, have adopted, attempted, and rejected when unworkable, several different programs which were designed to meet the varied student body needs. It is recognized that a community college can and should play an active role in effecting educational change; therefore PCC endorses experimental programs which could ultimately benefit the students.

Since 1966, the administration at PCC has introduced a variety of experimental approaches to provide meaningful programs for students with diverse needs. These offerings were primarily an attempt to enhance student success and reduce student attrition after discovering that numerous students, admitted under the open-door philosophy, withdrew or dropped out during the first year. Medsker and Tillery point out that the community college has been critized for its lack of holding power, and they furnish statistics which indicate that in public two-year colleges the second-year enrollment tends to be less than half of the first-year enrollment, thus suggesting more than a fifty percent attrition rate.[8]

---

[7] Terry O'Banion, "Student Personnel Work: An Emerging Model," Community and Junior College Journal, 41:6-14, November, 1970.

The first attempt by PCC to provide students with academic support was a Guided Studies Program. This program was designed to assist students who lacked the skills and abilities required for normal progress through chosen programs. Courses in the program emphasized subject matter content, were required, carried no credit, and thus were eventually resisted by both students and counselors. The Guided Studies Program was revised several times and finally eliminated in 1970 due to dissatisfaction and lack of evidence to show positive results. However, the College continued to explore ways in which to implement the open-door philosophy.

To provide help for the educationally disadvantaged student the Guided Studies Program was replaced in 1971 with a Developmental Program which was offered on a voluntary basis. The courses in this program were designed for students needing individual help, were taught on a systems approach, and carried department course titles and designations which allowed a student to receive college credit when he accomplished the prescribed objectives. The idea behind this approach was to remove the stigma of remediation, yet allow the student to remove deficiencies and progress individually toward college credit at his own speed.

---

[8] Medsker and Tillery, op. cit., p. 49.

Working in cooperation with instructors the administration reached the conclusion during the 1972-73 school year that special sections for the purpose of remediation would no longer be necessary because an adequate number of instructors in each department were then willing to work with students on an individual basis, and the College had developed an outstanding Reading Laboratory and Independent Study Laboratory with the latest equipment.

However, both the administration and faculty were still quite concerned about the student attrition rate which continued to remain high, about the large number of students entering without occupational goals, and about the general lack of motivation. Even though the College had eliminated the stigma of remediation and allowed students an opportunity to remove deficiencies within the framework of an existing course, students were still experiencing academic problems.

Classified as a major administrative problem at this juncture, additional attention was focused on this phase of the College in an attempt to correctly analyze the problem and determine what was missing from the existing program. Three discoveries were made: (1) programs since 1966 had placed almost all emphasis on subject content matter with little attention given to self-concept or humanizing the instructional process, (2) instructors recognized the fact that each student needed different treatment but lacked the necessary expertise required to write an individualized program for each student, and (3) career planning was given minimal emphasis.

A Title III Grant, awarded in 1973, enabled the College to approach the task of working with student problems in a manner which would allow exploration of the first two areas of neglect. Two innovative techniques were chosen for experimentation in these two areas: (1) the Human Potential Seminar process was chosen to enhance the student's self-concept and (2) a program called Personalizing Educational Programs which utilizes cognitive style mapping to aid the instructor in developing an individual prescription for each student. These two techniques were applied to an existing course for experimentation and offered during the 1973-74 school year.

Results were very favorable but limited due to the short period of time and the fact that adding these techniques to an existing course did not allow enough time to accomplish all the outlined objectives. In a meeting near the end of the year, the PCC Vice-President, Dean of Instruction, Dean of Student Services, Director of Counseling, Director of Special Services, Division Chairman of Language and Fine Arts, Department Head of Language Arts, and the appropriate instructors met to discuss ways to continue this encouraging experiment.

Out of this meeting evolved the idea of a new course to be offered under the auspices of Student Services, the first course in the history of PCC to be assigned to Student Services. This course would focus on the Human Potential Seminar, the educational cognitive style of the individual, and career planning. The idea was to design a course to inculcate in the student a positive attitude toward education, to cause the student to extend his enrollment for a longer period thus increasing his chance of success, to allow flexibility and humanism, and to help the student make realistic decisions about his college program.

REVIEW OF LITERATURE

At this juncture an array of issues were obscure and required an extensive search of the literature encompassing all facets of the student-centered program. The literature review primarily utilized ERIC documents, educational periodicals, and books related to management and education. An attempt was made to isolate similar studies and collect information on appropriate theories and concepts in the areas of administrative leadership, self-concept, individualized instruction, remediation, career planning, Human Potential Seminar, and Personalizing Educational Programs.

Administrative Leadership

The study of administration is at the present changing drastically. Educational administration has also become involved in this rapid change and may now be considered a leader in the change. Griffiths made this observation several years ago, but the evidence would seem that it is more correct today than it was then.[9] Until recently very little was done to train administrators who traditionally were promoted from within. Now numerous management systems have emerged to assist in grooming for leadership.[10]

---

[9] Daniel E. Griffiths, Administrative Theory (New York: Appleton-Century-Crofts, 1959), p. 19.

[10] Gary F. Petty, "A Practical Look at Management Personnel Development," Community and Junior College Journal, 45:16, August-

Demands placed on the educational administrator today require that he be a leader amenable to change and an individual with the ability to vary his leadership behavior to cope with differing situations. As Blanchard puts it, the typical successful leaders of today are those who are able to meet the demands of their own unique environment by adapting their leadership behavior.[11]

In general, the major emphasis appears to be focused on the leadership and change agent aspect of administration. Brown sheds some light on this direction when he points out that administration is the implementation of ideas rather than the conception of them, that the effective administrator makes ideas work, but he need not make them, and that the effective administrator seeks new ideas and new arrangements of old ones.[12] Leadership abilities therefore become critical if an administrator is to be effective.

According to Lahti, a leader must know himself, must be able to see himself as others see him, and be genuinely sensitive to how he affects other people. He recognizes that a leader must work with employees in setting and reaching realistic objectives.[13]

Leadership activities center around helping the people of the school community define their educational goals and objectives, facilitating the teaching-learning process, creating a climate for

---

September, 1974.

[11] Kenneth H. Blanchard and Paul Hersey, "Leadership Theory for Educational Administrators," Education, 90:303, April, 1970.

[12] Ray E. Brown, "How Good Administrators Get That Way," The Nations Schools, 71:49, June, 1973.

[13] Robert E. Lahti, Innovative College Management (San Francisco: Jossey-Bass Publishers, 1973), p. 17.

growth, and providing adequate resources for effective teaching.[14] To be a change agent the administrator must possess these leadership characteristics. Some observers insist that before an administrator can develop the skills needed to manage programs of innovation, he must have some knowledge of the change process itself.

Rogers classifies a change agent as a professional person who attempts to influence adoption decisions in a direction that he feels is desirable.[15] Havelock believes that a person can act as a change agent by being a catalyst, a solution giver, a process helper, or a resource linker.[16]

Tannenbaun added a different dimension to this topic when he acknowledged that the over-all importance is the human atmosphere that exists between the person trying to introduce change and those who are subject to the change. He contends that for individuals and groups to accept new ideas or methods that they must understand the reasons for the change, that they must understand that the change is going to be good for them, and that some new behavior will be called for on their part.[17] It is interesting to note that this type of atmosphere can only be developed through effective leadership.

---

[14] Association for Supervision and Curriculum Development, Leadership for Improving Instruction, 1960 Yearbook (Washington: National Education Association, 1960), p. 28.

[15] Everett M. Rogers, Diffusion of Innovations (New York: The Free Press, 1967), p. 254.

[16] Ronald G. Havelock, The Change Agent's Guide to Innovation in Education (Englewood Cliffs: Educational Technology Publications, 1973), p. 7.

[17] Robert Tannenbaun and others, Leadership and Organization: A Behavioral Science Approach (New York: McGraw-Hill Book Co., 1961), pp. 84-85.

Wynn discloses that the University of Tennessee has developed a program for school administrators which is designed to prepare them to function as change agents. The rationale of the program rests on the premises that for the administrator to function as a change agent he too must be capable of change, that he must understand the nature of change, that he must acquire some insight as to how they changed, and that he must be able to acquire skills in facilitating change among the people with whom they work.[18]

It seems obvious, then, that the effective administrator must function as a change agent and utilize his leadership ability to initiate innovations in educational practices. To perform this task in instructional improvement, he must analyze all facets of the educational process especially those which affect the student. In a student-centered program such as the WAGS, the administrator must be keenly aware of the student's role in the learning process. He must be knowledgeable in numerous areas, one of which is the student's self-concept.

Self-Concept

Fitts has discovered in his research that the self and the self-concept have been topics of study by the behavioral scientists since 1890. He relates that sociologists, psychiatrists, theologians, philosophers, educators, anthropologists, and psychologists are using the self-concept to better understand people and their behavior. Self-concept is defined as the belief that an individual has in his strength and ability or simply the views each person holds of himself.[19]

---

[18] Richard Wynn, Unconventional Methods and Materials for Preparing Educational Administrators, Commissioned by ERIC Clearinghouse on Educational Management. Published by University Council for Educational Administrators, 1972, p. 19.

Of particular importance is the report by Franseth that early scientific investigations were based on the assumption that human behavior was directed largely by biological drives. She relates that Pavlov's experiments demonstrated how external manipulation could control human behavior and that later studies proved that other forces were also important in the motivation behavior. Finally, her studies revealed that some researchers emphasize that the values and goals of an individual play an important role in directing his behavior and that values and attitudes, which once were thought to be determined by instinct, are learned through experience.[20]

A number of theories exist but most agree with Michael when he says that greater self-understanding is imperative if one is to increase one's ability to recognize and live with uncertainty, through exposure to turbulence and complexity, and to embrace error.[21] Otto concurs when he declares that if a person believes that he is weak, helpless or doomed to some fate, he will tend to behave in the way expected. However, if a person has a concept of himself as being one with untapped potential capable of coping with problems in his life, he will persist in efforts to cope.[22]

---

[19] William H. Fitts and others, The Self Concept and Self-Actualization (Nashville: Counselor Recordings and Tests, 1971), p. 3.

[20] Jane Franseth, Supervision as Leadership (Evanston: Row, Peterson and Co., 1961), p. 34.

[21] Donald N. Michael, On Learning to Plan--and Planning to Learn (San Francisco: Jossey-Bass Publishers, 1973), p. 195.

As Maslow puts it, healthy people feel guilty about shortcomings, prejudices, habits, laziness, or other deficiencies that they recognize as being improvable. According to him the general formula seems to be that healthy people will feel uneasy about discrepencies between what is and what might very well be or ought to be.[23] This is the dilemma in which many community college students find themselves. For some reason they have developed bad academic habits and a set of non-academic values which results in their being classified as educationally disadvantaged.

According to several studies, the disadvantaged student is described in relation to the effects of deprivation of aspirations, values, motivation, and self-concept. Cohen points out that students falling into this category need to develop positive feelings of worth and value along with the necessary manipulative skills necessary to fulfill his goals. He also recommends a comprehensive program designed to improve self-image, values, and reinforce motivation in order to give students a chance to experience enough success in learning to alter their behavioral pattern.[24]

---

[22] Herbert A. Otto, Explorations in Human Potentials (Springfield: Charles C. Thomas, Publishers, 1966), p. 363.

[23] Abraham H. Maslow, Motivation and Personality (New York: Harper and Row, Publishers, 1970), p. 157.

[24] Arthur M. Cohen and others, A Constant Variable (San Francisco: Jossey-Bass, Inc., Publishers, 1971), p. 81.

Community college students comprise a cross-section of the general population and therefore attract a large percentage of educationally disadvantaged students. O'Banion describes these students as those lacking confidence in themselves and being less likely to venture into new and untried fields. In general, the community college students appear to be more unsettled about future plans when compared to four-year college students and youngsters who do not go on to college.[25]

It seems obvious that the rapid growth of community colleges and the large numbers of students enrolling have resulted in a closer look at the student's concept of self. It is reported by Purkey that wise teachers for generations have recognized that a positive relationship exists between a student's concept of self and his performance in the classroom. He contends that those students who feel good about themselves and have confidence in their abilities are most likely to succeed. He argues that those who fail to achieve see themselves in a negative fashion.[26]

Since researchers agree that values are learned and that self-concepts can be altered, it becomes imperative that the educational process provide experiences which will enable students to develop their potential to the maximum.

---

[25] Terry O'Banion and Alice Thurston, eds., Student Development Programs in the Community Junior College (Englewood Cliffs: Prentice-Hall, Inc., 1972), p. 17.

[26] William W. Purkey, "The Self and Academic Achievement," Research Bulletin, Published by the Florida Educational Research and Development Council, 3:15, Spring, 1967.

Four steps are outlined by Purkey to aid the teacher in building adequate and realistic self-concepts in students. These are: (1) to see each student as a person of worth and dignity; (2) to provide an educational atmosphere characterized by warmth, respect, and safety; (3) to be sensitive to how students are seeing things; and (4) to convince each student that he is capable of coping with the school's expectations.[27]

It is obviously of utmost importance that educators recognize the role that a student's self-concept has in the educational process. Studies suggest that an individual's self-concept provides the educator with information which enables him to predict many aspects of the student's behavior. It was therefore essential that this concern become one of the major issues in the student-centered program development. Another area that received careful attention was the process of learning.

Learning

During the last few decades many theorists have developed theories which have contributed gradually to our knowledge of learning. Many writers believe that we are presently on the threshold of an exciting and revolutionary period. With our increasing knowledge of the learning process more and more institutions are willing to try new methods of instruction.

Skinner stated that students learn when they are induced to engage in new forms of behavior and that we should attempt to reinforce those behaviors we want learned and extinguish those we find undesirable. If learning in fact is this simple, the need for improving educational practices to produce desired behaviors should become alarmingly apparent.

---

[27] Ibid., p. 27.

The answer does not appear to be this simple. According to James Dees, it is recognized that there is no theory of learning currently available which is able to "explain" all the facts of learning and that there is little talk about the exclusive and ultimate correctness of one or another theory.[28]

Most definitions of education and learning are in terms of observable behavior changes. Hilgard defines learning as the process by which an activity originates or is changed through reacting to an encountered situation, provided that the characteristic of the change in activity cannot be explained on the basis of native response tendencies, motivation, or temporary status of the organism.[29]

According to Skinner a student is "taught" in the sense that he is induced to engage in new forms of behavior in specific forms upon specific occasions.[30]

Flynn points out that the only way in which we can study learning is by studying behavior or performance; but he also indicates that performance and learning do not always correspond in a one-to-one relationship, that learning can occur even though there are no observable changes in behavior. He related that such learning is termed latent learning and is exhibited when we read directions on how to do something, but do not perform the task until some later time.[31]

---

[28] James Dees, The Psychology of Learning (New York: McGraw-Hill Book Co., 1958), p. 302.

[29] Ernest R. Hilgard and Gordon H. Bower, Theories of Learning (New York: Appleton-Century-Crofts, 1966), p. 2.

[30] B. F. Skinner, The Technology of Teaching (New York: Appleton-Century-Crofts, 1968), p. 33.

Another opinion is that learning now appears to be largely biochemical or a modification of protein molecules within the brain; but Frank Logan advises that until such knowledge has advanced considerably beyond its present stage, it is of greater practical value simply to accept learning as a hypothetical process and talk about it in behavioral terms.[32]

Most writers agree basically that learning is a relatively permanent process which results from some activity or practice and results in a change in performance usually through the use of reinforcers. The impressive part that reinforcing events play in the control of learning in laboratory situations has led some psychologists to take the position that all learning involves reinforcing events and that, conversely, no learning will take place without the occurrence of reinforcing events. Those who maintain that all learning is dependent upon the occurrence of reinforcers refer to this generalization as the law of reinforcement or as the law of effect.[33]

---

[31] John M. Flynn, Learning Theory and Applications (Ft. Lauderdale: Nova University, 1973), p. 14.

[32] Frank A. Logan, Fundamentals of Learning and Motivation (Dubuque: Wm. C. Brown Co., 1970), p. 3.

[33] Robert M. Travers, Essentials of Learning (New York: The Macmillan Co., 1972), p. 45.

Teaching then becomes the act of guiding someone through a network of planned experiences with the hope that in the process the learner will somehow develop means for coping with novel experiences and as a result will learn.[34]

Considering the accumulated knowledge and findings supporting these theories, it behooves teachers to discard old methods and seek aids and new techniques which will be effective in helping all students learn. Teachers can no longer insist that they alone can teach when accumulated evidence indicates that new techniques lend invaluable support to the "teaching" and "learning" process.

Education must become more efficient. To this end, curricula must be revised and simplified, and textbooks and classroom techniques improved.[35]

The student-centered program encourages the use of innovative methods and techniques in the learning process which requires not only an understanding of learning in general, but an understanding of specific factors which result in learning.

Factors which result in learning involve numerous learning theories, many extremely complicated, which are classified and described different ways by different writers. The following is an attempt to isolate a few of the conditions in the learning process.

Stimulus-response. Stimulus-response learning was called trial-and-error learning by Thorndike and is called operant learning by

---

[34] Peter Rosenbaum, Peer-Mediated Instruction (New York: Teachers College Press, 1973), p. 1.

[35] B. F. Skinner, "Teaching Machines," Science, 67:969, October, 1958.

Skinner. The stimulus-response theory stresses that the learner's role be active rather than passive, that reinforcement and frequent repetition are important learning devices, that practice in varied contexts must be allowed, and that innate human drives, conflicts, and frustrations must be recognized and accomodated.[36]

Arthur Cohen points out that the stimulus-response theory suggests that the mind changes as a result of connections between series of trials and associations.[37]

Reinforcement. Thorndike was one of the first to explain reinforcement. Skinner and Hull were also strong supporters. Reinforcement can be defined as any event which follows a particular behavior which increases the probability of the behavior occuring again. According to Flynn reinforcement is defined in terms of its effect upon the response which it follows--that if a response is followed by an event and that event strengthens or maintains the response, the event is said to be a reinforcer. He concludes that reinforcement can only be identified by its effect on behavior.[38]

Feedback. According to experiments dealing with the principle of reinforcement, a learner's response is more likely to be repeated if the response is rewarded. This requires immediate feedback if any ongoing activity is to be pursued successfully.

---

[36] Hilgard, op. cit., p. 562.

[37] Arthur M. Cohen, Dateline '79: Heretical Concepts for the Community College (Beverly Hills: Glencoe Press, 1969), p. 183.

[38] Flynn, op. cit., p. 29.

Conditioning. Conditioning is the procedure of introducing a positive reinforcer immediately following a response with a resultant increase in the frequency of that response. A response whose frequency has been increased in this manner is said to have been conditioned. Most agree that for conditioning to occur, the reinforcer must be presented closely after the occurrence of the behavior that is to be increased. Pavlov spent most of his life working with conditional reflexes and is the one who gave them their name.

Respondent conditioning. Pavlov is given credit for developing respondent conditioning which involves a stimulus substitution where a new stimulus brings about a reflex or a respondent behavior. Skinner supported this concept and classified behavior either as respondent or emitted behavior.

Operant conditioning. In operant conditioning, behavior is controlled by its consequences and those consequences can be either reinforcement, punishment, or extinction. In operant conditioning either a new response is learned or an old one modified. Operant conditioning then can be defined as the process in which a reinforcer immediately follows to condition a voluntary behavior which is emitted without an elicited or recognized stimuli.

Extinction. When referring to the unlearning of behavior, the term extinction is used. It is defined as the process of withholding reinforcement to a response which had previously been learned through reinforcement until the response is finally occurring no more often than prior to conditioning. A similar definition has been used widely in the writings of Skinner.

Shaping. Shaping is the process of using positive reinforcement to bring about entirely new responses and behavioral sequences.

These factors in the learning process are essential to another major issue involved in the student-centered program development. Specifically, the concern that students have different learning styles and learn in different ways at different rates. Therefore individualized instruction was included as an integral component in the program.

Individualized Instruction

It is interesting to note that a major concern about individual differences among students began in 1922 with the pioneering work of Terman and that in 1954 he observed that schools were more opposed to this approach at that time than they were when his studies were first begun.[39]

However, during the last decade considerable activity has revolved around individualized instruction and innovative programs designed to utilize an individualized approach. Even the most casual look reveals attempts to not only individualize the teaching process but to humanize it at the same time. Student involvement has become the concern of most agressive educators because evidence supports the view that learning is more effective when students are encouraged to participate. Harris supports individualized instruction for students at all levels.[40]

---

[39] Ohmer Milton, Alternatives to the Traditional (San Francisco: Jossey-Bass Inc., Publishers, 1972), p. 33.

[40] James A. Harris, "Drastic Proposals for Educational Improvement," Today's Education, 63:5, November-December, 1974.

Popham recommends differentiated instruction when planning instructional sequences for the learner. He urges the use of two methods. One that he recommends is the modification of the objectives for different students so that particular learners are given different objectives. The second method that he recommends is the use of different means to accomplish identical instructional ends.[41]

A review of the literature reveals extensive work toward individualized instruction and utilization of objectives, but there is a void of information on how to adequately prescribe the way a student could best learn.

The work of Benjamin S. Bloom contributed greatly in helping curriculum builders specify objectives so that it becomes easier to plan learning experiences and prepare evaluation devices.[42] His work can also help one gain a perspective on the emphasis given to certain behaviors by a particular set of educational plans. Probably the most helpful aspect of his work for students is the measuring of objectives. This was a tremendous contribution to education, but the basic problem of how to determine how a student learns best was still unsolved.

However, despite the lack of progress made in how to effectively write prescriptions, various programs have been developed in an attempt to individualize instruction. A step in the right direction occurred in the Fall of 1964, when the PRIME Learning System was developed and later used in Job Corps Training. This was a system that used prescription, instruction, motivation, and evaluation of the student. The students were motivated by a selection of rewarding activities that would create a desire for further achievement.[43]

---

[41] W. James Popham and Eva L. Baker, Systematic Instruction (Englewood Cliffs: Prentice-Hall, Inc., 1970), p. 87.

[42] Benjamin S. Bloom and others, Taxonomy of Educational Objectives (New York: David McKay Co., Inc., 1969), Handbook I and II.

Each individualized program developed during the last decade involved something a little different added to the program in an attempt to make it workable. Yet despite this unceasing drive to find an effective program the literature reveals constant resistance by most teachers who had concluded that learning packages didn't work.

Tunks observed that all too often the trouble was not in the instructional materials but in the management of the program and the approach used by the teacher. To satisfy this need he outlined a program designed to maximize the individualization that learning packages can provide for students. His program encourages meeting the needs of students commensurate with their ability, interest, and motivation.[44]

Under the growing demands a significant number of colleges have developed programs which not only individualizes instruction but provides for nonpunitive grading. Students who fail to meet the minimum requirements for a course are given some grade other than the traditional F. This technique permits the student to repeat the course and complete only those segments in which he was not proficient.[45]

---

[43] S. R. Wilson and D. T. Tosti, Learning is Getting Easier (San Rafael: Individualized Learning Systems, Inc., 1972), p. 121.

[44] Roger Tunks, "Classroom Strategies for Success with Packages," Journal of Secondary Education, 46:210, May, 1971.

[45] B. Lamar Johnson, Islands of Innovation Expanding (Beverly Hills: Glenco Press, 1969), p. 253.

Tutoring has been classified as the ancient form of individualized instruction. It is an instructional model which has been endorsed by many students of human behavior. Thelen insists that the effectiveness of instruction is increased by the tutoring process because the tutor can give his full attention to the tutee and only one person's choices among activities and materials have to be considered.[46]

Cohen predicts that the community college of 1979 will include tutorial and programmed sections in each of the core courses which will require students to report regularly to tutors, usually fellow students, who will help them learn by asking questions and by providing immediate feedback to their responses.[47]

Peer tutoring appears to have a bright future with increased attention being given the process by researchers. Elliott reports that just recently researchers have developed a model known as "structured tutoring." In this instructional model the student-tutor does not simply do his thing in some vague manner but follows a well-planned instructional sequence very similar to a programmed instruction format.[48]

With our increasing knowledge of the learning process and individualized instruction, the demand is toward improved techniques.

---

[46] Herbert A. Thelen, "Tutoring by Students." The Education Digest, 35:19, February, 1970.

[47] Cohen, op. cit., p. 28.

[48] Arthur Elliott, "Student Tutoring Benefits Everyone," Phi Delta Kappan, 54:536, April, 1973.

More schools are utilizing audio-visual aids, programmed instruction, individualized programs, as well as teaching machines.

However, teaching machines are not new. Pressey developed in the 1920's several machines which were designed for the automatic testing of intelligence and information. He pointed out that such machines could not only test and score but that they could also teach. Pressey seems to have been the first to emphasize the importance of immediate feedback in education and to propose a system in which each student could move at his own pace. He recognized that when an examination is corrected and returned after a delay of many hours or days, the student's behavior is not appreciably modified and that the immediate report supplied by a self-scoring device had an important instructional effect.[49]

In general, learning theories, individualized instruction based on objectives, programs including audio-visual aids, tutoring, teaching machines, and other instructional aids provide the instructor with tangible materials for the teaching process. But specifically, the intangible elusive task of writing a prescription to effectively program a student for maximum learning is still nebulous. Nevertheless, two relatively new programs show promise.

The American Institute of Research, the Westinghouse Learning Corporation, and twelve participating school districts throughout the United States, through coordinated efforts, developed a data based system of individualized education called PLAN.[50] This acronym stands for Program of Learning in Accordance with Need.

---

[49] Skinner, loc. cit.

Rhetts portrays PLAN as a program which features the specification of alternative learning activities designed to lead students to mastery of instructional objectives. The system consists of an inventory of modules designed to fit varying needs. Students are matched with modules to fit their individual needs. The basic assumption of the matching process is the idea that a student will perform better at a task which is based upon abilities and interests which he possesses.[51]

The PLAN system tackles the real problem of correctly matching a student with the proper tasks. This is a step toward adequately prescribing what the student needs. However, the matching process used seems to rely too much on instructor judgment.

The most promising program at the present is called the PEP. This acronym stands for Personalized Educational Programs. The thrust of the program is to develop an educational prescription for each student based on his strengths as shown on a cognitive style map. The maps are obtained from a computer after each student spends four hours reacting to an evaluation battery.[52] Since this program was chosen to be an intricate part of the student-centered program, the undergirding theories will be discussed in a later section.

---

[50] William Webster and Gordon K. McLeod, "An Empirical Approach to Curriculum Design," Education, 90:252, February, 1970.

[51] John E. Rhetts, "The Impact of Student Learning Style on Curriculum Assignment and Performance in the PLAN Program of Individualized Instruction," Education, 90:248-251, February, 1970.

[52] Joseph E. Hill and Derek N. Nunney, "Personalized Educational Program," Audiovisual Instruction, 17:10, February, 1972.

Individualized instruction, due to its flexibility, enables educators to work with the underprepared student, the average student, and the advanced student as his needs dictate. Since many community college students require various degrees of remediation, the individualized instructional method appeared to be the logical approach for the student-centered program to employ to assist students with weak academic backgrounds. In addition to individualized instruction, remediation continues to be a topic on which there is considerable disagreement.

Remediation

Most colleges recognize that basic education is needed and agree that this service should be provided but most disagree on how it should be carried out. Matson believes that the professional student personnel worker has an important responsibility in these programs but that it is a shared responsibility since the instructional staff should be involved. She declares that the job of a comprehensive community college is to provide appropriate educational opportunities for all who seek its help and that the primary task of the student personnel specialist is to interpret to the instructional staff the characteristics of the students and their implication for the learning process.[53]

---

[53] Jane Matson, Emerging Trends in Junior College Student Personnel Work, U.S., Educational Resources Information Center, ERIC Document ED 021 255, April, 1968, p. 17.

The whole problem with remediation is that very few agree that it is a joint responsibility of student services and instruction. Disagreement also exists relative to theories and remediation programs. The one point that everyone can agree upon is that a problem does exist Medsker and Tillery substantiated the problem when they reported that an estimated thirty to fifty percent of students entering open-door colleges are in need of basic skills necessary for college study. Furthermore, they indicate that these figures hold true for those students aspiring to an advanced degree as well as those who seek preparation for employment.[54]

These facts parallel reports dealing with community college students nationwide. The responsibility must not be ignored nor transferred from one area of the college to another. Perhaps instructors are reluctant to accept remediation responsibilities because they have not been trained to cope with this type of problem. Herrick argued twenty years ago that teacher training centers were not giving the necessary attention to bring about changes in teacher behavior.[55] For the most part, very little was done to aid the teacher in adapting the curriculum to the needs of the educationally disadvantaged.

It seems obvious that the problem rests with the community college administrator. He must act as a change agent to see that positive steps are taken to meet student needs. It is the contention of Herrick that theories and concepts of curriculum are developed, nurtured, and improved through administrative action.[56]

---

[54] Medsker and Tillery, Breaking the Access Barriers: A Profile of Two-Year Colleges, op. cit., p. 65.

[55] Virgil E. Herrick, "Approaches to Helping Teachers Improve Their Instructional Practices," School Review, December, 1954, p. 527.

A plethora of theories and opinions can be found on the topic of remediation. Havighurst argues that disadvantaged students have difficulty because of a family environment which limits perceptual, conceptual, linguistic experiences which are necessary for success. He also contends that teaching methods have not been adapted to the learning styles of the disadvantaged student. In conjunction with this, he states that there is no special need for a special curriculum for the disadvantaged but that adaptations of the ordinary curriculum should be made to fit specific knowledge deficiencies and self-image needs.[57]

Some observers note that a great deal of effort has gone into remedial programs during recent years. Schultz considers several factors accounting for this. The evidence would appear that most remedial education has been a failure due to the fact that implied purposes have not been achieved. In addition an increasing number of students from economically and educationally deprived backgrounds are enrolling in college. He also believes that a growing sense of responsibility exists for developing realistic experiences for all students who enter open-door institutions.[58]

---

[56] Virgil E. Herrick and others, "Administrative Structures and Processes in Curriculum Development," Review of Educational Research, 30:258, June, 1960.

[57] Robert J. Havighurst, "Curriculum for the Disadvantaged," Phi Delta Kappan, 51:373, March, 1970.

[58] Raymond E. Schultz, "Curriculum Trends and Directions in American Junior Colleges," Peabody Journal of Education, 48:266, July, 1971.

The Carnegie Commission on Higher Education reports that community colleges find it necessary to provide remedial education and indicate that the need will continue until greater progress is made in overcoming deficiencies at the elementary and secondary level. The Carnegie report concurred that traditional approaches to remedial education frequently do not achieve successful results, and that programs which encourage individualized instruction are needed. The Commission recommends remedial education that is flexible and responsive to the individual student's needs.[59]

Despite the progress made in curriculum development, major problems are still encountered in the construction of a course of study relative to subject matter and how to stimulate thought.[60] Nevertheless, Foshay claims that the innovative strategies giving attention to design, local experimentation, redesign for local purposes, and continued evaluation appear to be working.[61]

The student-centered program takes exception to the old concept that something had to be done to the student to make him eligible for entry into a college program and employs techniques designed to assist students in acquiring the necessary skills and attitudes needed to achieve their goals.

---

[59] Carnegie Foundation for the Advancement of Teaching, Commission on Higher Education, The Open-Door Colleges: Policies for Community Colleges, special report (New York: McGraw-Hill Book Co., 1970), p. 51.

[60] Jerome S. Bruner, The Relevance of Education (New York: W. W. Norton and Co., 1973), pp. 59-67.

[61] Arthur W. Foshay, Curriculum for the 70's: Agenda for Invention, U. S., Educational Resources Information Center, ERIC Document ED 053 075, September, 1970, p. 70.

Another major issue involved in the student-centered program development was the concern for the large percentage of enrolling freshmen who were undecided about the occupation they plan to follow. Career planning was included as a part of the program.

Career Planning

Those in the field of education who have kept up with weekly or monthly journals realize that there has been a rapid increase in the amount of publicity given to career education.

Most community colleges are caught in the mainstream of this change and are attempting to develop career planning services to inform students regarding the varied programs from which he has to choose. The trend from the nation's capital down has been to increase occupational programs. Even the use of government financial support has been utilized to promote these occupational programs.

A development of recent years, as the merger of community colleges and the vocational schools tends to increase, is the occupational certificate program. These programs include only the essential skills required for a specific vocation and do not include the general education college courses required for a two-year degree.

Most educators agree on the need for occupational education and are willing to develop occupational programs to train students for gainful employment. However, the entering freshmen for the most part fail to appreciate what has been developed for them. Thus, there is a need for career planning since most students eventually work and they should be assisted in making plans for their future.

Medsker and Tillery discovered that a minority of two-year college students declare vocational majors upon entering college.[62] They further emphasize the fact that guidance needs for these students are particularly crucial since they have not developed clear educational and vocational goals and are usually vulnerable to interrelated financial, academic, and personal pressures.[63]

National studies, according to Gleazer, reveal that as many as two-thirds of those enrolling in the community college sign up for a transfer type program but actually two-thirds will not transfer to a four-year college.[64]

We must provide the proper setting for students to make realistic choices. Collins believes that the adequate career planning requires precise occupational information which is current and relevant to the student.[65]

Many students need a period of personal orientation in college while they look around at various career possibilities, wait for a job, and/or wait for marriage. This conclusion was reached by the Carnegie Commission along with the belief that guidance should be the concern of the entire faculty and not just of the professional counselors. The Commission maintains that a guidance program should be designed to encourage students to make choices between curricula designed for job entry and those designed for additional education before specialization.[66]

---

[62] Medsker and Tillery, op. cit., p. 59.

[63] Ibid., p. 63.

[64] Edmund J. Gleazer, Jr., This is the Community College (New York: Houghton Mifflin Co., 1968), p. 66.

[65] Charles C. Collins, College Orientation: Education for Relevance (Boston: Holbrook Press, Inc., 1970), p. 204.

In the opinion of Gilliland, many people make career choices based on shaky evidence due to the lack of an adequate career planning program. He contends that the dissatisfaction expressed by people today is probably due to poor career choices.[67]

Mood agrees that more attention should be given to career planning. He points out that career planning should do more than provide information about careers. Since satisfaction with a career depends on the individual making the choice, every student should be individually counseled to assure that his choice will match his personality, his abilities, and his needs.[68]

Venn describes education as a bridge between the individual and his work and argues that vocational guidance and educational guidance are inseparable. He is convinced that the need for guidance has increased because of the rising level of education required for work today and that the lack of guidance establishes a barrier between continuing educational programs and those who need them most.[69]

Pitcher brings the whole problem into focus when he states that there are few humans with a very clear idea of self at the age eighteen or nineteen and that one of the purposes of college is to help the young person discover his identity and guide him in making a wise career choice.[70]

---

[66] Carnegie Foundation, op. cit., p. 22.

[67] J. Richard Gilliland, "Maximizing Student Success," Community and Junior College Journal, 44:13, March, 1974.

[68] Alexander M. Mood, The Future of Higher Education (New York: McGraw-Hill Book Co., 1973), p. 85.

[69] Grant Venn, Man Education and Work (Washington: American Council on Education, 1964), p[illegible]. 148-150.

The review of the literature in the areas of administrative leadership, self-concept, individualized instruction, remediation, and career planning focused attention on national trends, varying theories and concepts. Many of these findings were utilized in the student-centered program. Two areas covered in the literature, which could be classified as the nucleus of the student-centered program, required extensive analysis to ensure that their role be given the proper perspective. Therefore the undergirding theories of the Human Potential Seminar process and the Personalizing Educational Programs received an extensive examination.

UNDERGIRDING THEORIES

The student-centered program utilizes the Human Potential Seminar process to involve the student in positive experiences which enhance his self-concept. In addition the Personalizing Educational Programs technique is included to help the student understand his learning style and to assist instructors in the writing of prescriptions to fit each student's educational needs.

It is primarily essential for administrators to understand these two techniques. Since these techniques are relatively new, and most administrators are unfamiliar with them, each one is analyzed in detail.

---

[70] Robert W. Pitcher and Babette Blaushild, Why College Students Fail (New York: Funk and Wagnalls, 1970), p. 37.

Human Potential Seminar

The Human Potential Seminar is designed to get more humanity into the classroom and to enhance the student's self-concept. It is a group process which was developed at Kendall College in Evanston, Illinois.[71]

Undergirding concepts and theories. Current literature discloses numerous concepts and theories on which the Human Potential Seminar process is based:

1. The individual's self-concept is that which primarily guides, controls, and regulates his performance and actions.[72]

2. Perhaps the most significant and difficult barrier the human potentialities movement confronts is the established value-hierarchy with respect to human abilities.[73]

3. Humanizing involves positive efforts to increase an individual's self-esteem, his self-confidence and his feelings that he can make a worthwhile contribution to society.[74]

4. A limitation that we know hampers people in expanding their world has to do with the self-concept, which we now recognize as perhaps the most important single factor in determining what a person

---

[71] James D. McHolland and Roy W. Trueblood, Self-Actualization and the Human Potential Group Process, U. S., Educational Resources Information Center, ERIC Document ED 055 295, January, 1972, pp. 1-17.

[72] Wallace D. LaBenne and Bert Greene, Educational Implications of Self-Concept Theory (Palisades: Goodyear Publishing Co., 1969), p. 20.

[73] David Elkind, "Increasing and Releasing Human Potentials," Childhood Education, 47:347, April, 1971.

[74] Robert Trotter, "Self-Image," Science News, 100:130, August, 1971.

is able to do under any given circumstance. People behave in terms of their self-concept. What a person believes about himself affects everything he does, even what he sees and hears, and is of tremendous significance in determining how effectively he will be able to deal with the world in which he lives.[75]

5. Intelligence itself is a function of a person's self-concept. Those who have positive self-concepts because they feel good about themselves are able to try, to be creative, to go out into the blue and make use of their world.[76]

6. There is no doubt that great insights and revelations are profoundly felt in mystic or peak-experiences.[77]

7. Most human beings put tremendous effort into covering up their real being, disguising their true selves, and hiding their feelings.[78]

8. Positive qualities of all youngsters should be emphasized, especially the less able.[79]

9. Self-concept can be changed as behavior is changed. As a student is helped to do successfully he can begin to feel successful.[80]

---

[75] Arthur Combs, "New Concepts of Human Potentials: New Challenge for Teachers," Childhood Education, 47:352, April, 1971.

[76] Ibid., p. 353.

[77] Abraham H. Maslow, Religions, Values, and Peak-Experiences (New York: The Viking Press, 1972), p. 75.

[78] Herbert Greenberg, Teaching with Feeling (New York: The Macmillan Co., 1969), p. 205.

[79] James Watson, "I'm Just Plain Dumb--How to Change Negative Self-Concepts in Low-Ability Children," Todays Education, 62:26, March, 1973.

[80] James D. McHolland, Human Potential Seminars: An Approach to

10. The value system of a person is his total reservior of assumptions concerning interpersonal behavior.[81]

11. We use the term value to refer to the tendency of any living beings to show preference in their actions, for one kind of object or objective rather than another.[82]

Human potential seminar philosophy. The purpose of the Human Potential Seminar is to help each person discover what it is about himself that he can like and build upon it--in short, to increase his humanness by changing his way of feeling and thinking about himself. More specifically the goals are those of (1) self-affirmation, (2) self-determination, (3) self-motivation, and (4) creating of empathetic persons.[83]

"We bring students together," declares McHolland, "in the Human Potential Seminars to give them a small group educational experience, not group therapy. The purpose is to discover how to better utilize resources that each student may have."[84]

Turning on the Gifted Underachiever, U.S., Educational Resources Information Center, ERIC Document ED 047 349, February, 1971, p. 3.

[81] Camilla Anderson, "Self-Image: A Theory of the Dynamics of Behavior Updated," Mental Hygiene, 55:367, July, 1971.

[82] Carl R. Rogers and Barry Stevens, Person to Person: The Problem of Being Human (Lafayette: Real People Press, 1967), p. 14.

[83] James D. McHolland, The Release of Human Potential Through Human Encounter, U.S., Educational Resources Information Center, ERIC Document ED 030 926, March, 1969, p. 4.

[84] James D. McHolland, Every Student is a Gifted Student, U.S., Educational Resources Information Center, ERIC Document ED 030 927, November, 1969, p. 5.

The Human Potential group process was developed with the express purpose and goal of assisting persons to gain a more positive self-image. It was assumed that self-concepts are learned, that one is not born feeling inferior, inadequate, nor superior. If one has learned to think of himself negatively, then he can learn to think of himself in more positive terms as well.

Dr. Herbert Otto, a key theorist, has suggested on the basis of his research that most persons function at ten percent of their potential. So, the seminars are aimed at both the ten percent that is being realized and the ninety percent that is not.[85]

Analysis of human potential seminar process. The Human Potential Seminars are divided into nine phases and are structured so that all participants experience the nine phases of the process. These phases are well defined in a manual prepared for those leading a group.[86] There is also a manual designed for the participant.[87] Briefly, each phase can be described as follows:

1. Personal unfoldment. The purpose of the personal unfoldment experience is to allow persons to begin talking positively about themselves in relation to the person, events, and experiences which have helped make them who they are now.

---

[85] Roy W. Trueblood, "Group Psychotherapy, T-Groups and Human Potential Seminars--A Comparison" (unpublished paper, Kendall College, 1969), p. 6.

[86] James D. McHolland, Human Potential Seminars: Leaders Manual (Evanston: Kendall College Press, 1972), 66 pages.

[87] James D. McHolland and Roy W. Trueblood, Human Potential Seminars: Participants Workbook (Evanston: Kendall College Press, 1972), 43 pages.

To do so with persons who listen and are understanding, can bring focus to a person's life and a sense of being cared about. In this brief self-disclosure, a person begins to trust and to experience intimacy. Participants are encouraged to talk about themselves by giving a general short biographical sketch focusing on influential persons and events and ending with a high moment or happy experience. They are also asked to relate some specific experience such as a joyful experience, a formative decision, a successful experience or a significant person in their life.

In essence, the participant is being asked to think about what or who has helped make him who he is presently. The emphasis is on life experiences or events and "shaping" persons rather than on chronology and dates. Participants are encouraged to unfold in a specific and meaningful way, rather than generally and superficially.

2. Empathetic recall. In this exercise all group members are encouraged to remember verbal and nonverbal communications which each person made during his unfoldment. Two purposes are served by this recall. First of all, persons learn that they have been listened to. Thus, they are already becoming regarded as persons of worth. Secondly, they learn that they have the potential to listen to people and to relate to them in a significant and affirming manner. To experience that people have really been tuned in to him affirms a person. Thus, trustful empathy is developed through the empathetic recall process.

3. Action goal setting. Through short term, regular goal setting and achievement, participants are encouraged to develop their

autonomy, self-determination and self-motivation. Goal setting is an "action" aspect of the human potential experience. It is through this process that people are invited to believe that they can shape and direct their life to a large extent. In essence, the participant is told, "you can do much more than you think you can, once you decide to do it." For many persons, short term goal-setting begins to redefine goal setting in such a way as to help persons gain confidence and enthusiasm that they can shape their life. It brings goals out of the distant future and puts them in the present where one has some control over them.

4. Recall of peak experiences. The peak experience recall method serves at least four purposes: (a) on a personal level, individuals are encouraged to move a step closer toward healthful self-affirmation and self-actualization by recalling and sharing healthful, positive growth experiences which they have had; (b) in this process, persons are more able to see "growth continuity" in their life as well as clues to personal strengths and potentials which may lie somewhat dormant; (c) persons are encouraged to plan for and open themselves to new "peak" experiences; and (d) in a group or class context, a further development of trust, empathy, and a cohesiveness among persons is created.

A peak experience is defined as any experience in one's life which is highly positive in its outcome. Participants are told that it is one of those high moments that one can always remember. Most likely, a peak experience will be positive in its entirety.

5. Formative experience association or recalling "mini peaks." When persons have defined peak experience to include only the "highest, best, happiest" moments, they have excluded many experiences which could provide an increase in self-understanding and self-affirmation. People have learned to value peaks almost to the exclusion of the frequent, positive growth experiences which occur. It is assumed that as persons learn to redefine peak experiences more inclusively, self-affirmation and self-actualization can be enhanced.

The formative experience association or "mini peak" recall method assists a person in remembering positive experiences throughout his lifetime. Empathy is deepened and personal excitement is often experienced as one recalls fond memories. During such recollections, one can begin to see evidence of his potentiality through experiences once enjoyed but now laid aside. In seeing who he has been, he also sees who he is and can become.

6. Acknowledgement and analysis of satisfaction achievement and success experiences. The purpose of this phase of the Human Potential Seminar is to increase positive self-esteem.

Self-esteem is directly related to the achievements, successes, and satisfactions a person can acknowledge in his life. Thus, the purpose of this phase is to have the participant identify as many of those experiences as he can.

Satisfactions, achievements, and successes vary from person to person. No one definition of these words applies to all individuals. What is important is that each person defines where and what these experiences are in his life and expands his definitions so that they are more inclusive.

Another major purpose of this phase is to determine unique personal motivators and experiences that are most motivating for each individual. If a person knows what is uniquely motivating to him, he can build on that motivation to increase the number of satisfactions, achievements, and successes he has.

During this analysis individuals determine primary and secondary motivators and identify those experiences which are most motivating.

7. Clarification of personal values. This phase of the Human Potential Seminar serves three purposes: (a) to clarify specifically the five top values of each individual, (b) to clarify the importance of each individual's top five values through value ranking, and (c) to action-test the importance of one's top five values through short-term goal setting.

Each individual has values. That is, those things or personal characteristics that one feels are worthwhile. Values are important because they ultimately determine the choices we make every day, as well as our behavior. In other words, we live by a value system. Sometimes that value system is unclear. In fact, our values are often more clear to others than they are to ourselves.

Personal values hold the key to personal motivation, self-determination, conflict resolution, and a life-style with meaning. When a person is aware of his values, he can make conscious decisions based upon them and feel he is directing the course of his life. Thus, a greater feeling of self-affirmation is also created when one feels in control of his life and behavior rather than controlled by forces and values outside himself.

A direct relationship exists between a person's value structure and his motivation. That is, what one values he will be motivated toward achieving for himself. This is not to say that what one says he values will necessarily motivate him.

8. Acknowledging personal strengths. The purpose of this phase of the Human Potential Seminar is to assist persons in affirming their own personal strengths and assets and to help them to give and receive positive feedback from other persons. The result is improvement in self-esteem and deepening in empathetic regard.

We live in a culture which focuses more on the negative than the positive. Most of us are rather experts at analyzing our weaknesses and admitting our hangups at least to ourself. Few are as adept at admitting our strengths. Yet learning theorists tell us that positive evaluations and rewards are more effective motivators than are negative evaluations or punishments. The intent of the strength acknowledgement phase, then, is to affirm that we have strengths, too. Since strengths are often over-looked or denied, in this phase focus is placed on them. Throughout the Human Potential process, the move is toward self-committment. Talking about formative growth experiences, successes and satisfactions and personal strengths seen now, represents a progression in self-affirmation.

9. Long range goal setting. The Human Potential Seminars are conceived as a bridge into one's ongoing life rather than as a self-contained experience. Few positive experiences have lasting value and benefit unless they are reinforced. Hence, long range goal setting serves the twofold purposes of providing personal reinforcement of

one's values, strengths, and motivators; while at the same time insuring that the process can continue beyond the termination of contact with the group.

Long range goal setting, almost by definition, suggests at least a passing recognition that lifestyle planning is involved. Thus, a further purpose of this final phase is to assist a person in clarifying and reinforcing for himself his own lifestyle. Once a person knows what kind of life he would like for himself or what kind of person he wants to be, the next step is testing that lifestyle by goal setting and reinforcement.

Long range goal setting is based upon an awareness of personal motivators, values, and strengths on the one hand and goal setting aids on the other.

Human Potential Seminar sessions are limited to approximately ten students with a leader and a co-leader. Due to the structure, students are encouraged not to miss a session.

The last area to be covered, Personalized Educational Programs, had its beginning with Dr. Joseph E. Hill, President of Oakland Community College.

Personalized Educational Programs

The PEP was selected as the technique which appeared capable of assisting instructors in the writing of prescriptions for individualized programs. As pointed out earlier this emphasis was necessary since instructors were frustrated because they lacked the necessary expertise required to write an individualized program for each student. They recognized the fact that students learn in different ways and at different rates but were at a loss when they had to write prescriptions for students which would include ways that each individual would learn most effectively. Many attempts over the last decade have been made in the educational field to devise an educational system that will meet the needs of students.

Gotkin emphasized the lack of research in this area when he pointed out that programmers have contributed to the individualizing of instruction which is not the same as providing for individual differences.[88]

In a recent study Warner recognized that many studies have been made in an effort to compare instructional methods but that relatively few studies had been made to discover which instructional methods were most effective for certain types of individuals.[89]

Setz agrees that if community colleges are to aid students in overcoming inadequate preparation it is imperative that colleges investigate the total process of learning. Not only must special programs and counseling be provided but the different ways in which individuals acquire knowledge must be determined.[90]

Bushnell describes the PEP (Personalized Educational Programs) system as an attempt to personalize the learning process and tailoring the curriculum to individual student learning styles.[91] The thrust of the program is to develop an individual prescription, tailored to the student, based on strengths shown in his cognitive style map. The prescription could include lecture, films, audiotapes, television, small group sessions, tutoring, seminars, programmed instruction, or any other instructional media available.

---

[88] Lassar G. Gotkin, "Cognitive Development and the Issue of Individual Differences," Programmed Instruction, 4:1, October, 1971.

[89] James L. Warner, "An Analysis of the Cognitive Styles of Students Utilizing Different Modes of Instruction" (unpublished manuscript, Oakland Community College, 1971), p. 1.

[90] Betty Setz, "Prescription for Personalized Education" (unpublished manuscript, Oakland Community College, 1971), p. 1.

The aim of the PEP is to diagnose the style of the student, determine his strength, and begin to instruct him utilizing media which will capitalize on his strengths. The task becomes one of matching the cognitive style of the student to the style of the mode of presentation of information.[92]

According to Ausubel cognitive style refers to self-consistent and enduring individual differences in cognitive organization and functioning.[93] The PEP approach designed by Dr. Joseph Hill at Oakland Community College utilizes cognitive style mapping, and is based on sound educational theory.

Oakland Community College accepts the premise that no two students seek meaning in exactly the same manner. Hill believes that ninety percent of the students with normal ability can learn ninety percent of the material ninety percent of the time if the teaching methods and media are adjusted to the student's educational cognitive style.[94]

---

[91] David S. Bushnell, Organizing for Change: New Priorities for Community Colleges (New York: McGraw-Hill Book Co., 1973), p. 105.

[92] Derek N. Nunney and Joseph E. Hill, "Personalized Educational Programs" (unpublished manuscript, Oakland Community College, 1974), p. 1.

[93] David Ausubel, The Psychology of Meaningful Verbal Learning (New York: Greene and Statton, 1963), p. 95.

The principle objective of the program is to identify each student's learning style, discover how he perceives the world and tailor his education to include optimal methods of accomplishing the desired educational objectives. According to Hill, one's cognitive style is his unique mode of behavior in the search for meaning which provides a framework for application to the basic education processes by teachers.[95]

An individual's cognitive style is determined by the way a person takes note of his total surroundings, how he seeks meaning, how he becomes informed. Whether he is a listener or a reader, whether he is concerned only with his own viewpoint or whether he is influenced in decision-making by his family or associates, whether he reasons as a mathematician, or as a social scientist, or as an automotive mechanic; these are but a few examples of what Hill looks for in a student's cognitive style. A cognitive map provides a picture of the diverse ways in which an individual acquires meaning.[96]

---

[94] Joseph E. Hill, The Educational Sciences (Bloomfield Hills: Oakland Community College Press, 1974), p. 3.

[95] Joseph E. Hill, An Outline of the Educational Sciences: A Conceptual Framework (Bloomfield Hills: Oakland Community College Press, 1969), p. 6.

[96] Hill, loc. cit.

Even though Hill's interest in cognitive mapping goes back seventeen years, he continues to seek answers. He now estimates that about twenty-five percent of Oakland's students are currently using cognitive style mapping and is working toward increasing this number to fifty percent. Colleges in Toronto, Montreal, and several schools in Michigan are experimenting with this approach. At Oakland the method is being refined and improved. Even though the above work has been done, Hill stated in an article by William Hampton that "we're really just starting, . . . there are generations of work ahead."[97]

The development of a cognitive map, which is utilized in developing prescriptions, requires a battery of tests and inventories. These "tests" take approximately four hours to administer and are designed to measure abstractions, visual and manual coordination, various senses, and personal characteristics.

Results from the battery of tests and inventories are processed through Oakland's computer system to produce a map of cognitive traits that describe the many ways each student might seek meaning. Cognitive maps are printed out in three sets. Appendix A depicts a sample cognitive style map. The first set indicates a student's tendency to use certain types of symbols, his ability to understand words and numbers, qualitative sensory symbols, qualitative programmatic symbols, and qualitative codes. The second set indicates influences which the student brings to bear in deriving meaning from symbols. These influences are affected mainly in terms of his own individuality, or his associates perceptions, or those of his family. The third set indicates the manner in which he reasons, or the way in which he infers. Whether he thinks in categories, or in terms of differences, or synthesizes multiple relationships, or uses all three. A maximum of 2,560 different profiles are possible for an individual to show in his map.

---

[97] William Hampton, "Students Find Their Way to Learning With Cognitive Style Mapping," College and University Business, 52:10, February, 1972.

Dr. Hill argues that if education is to be regarded as a relatively rigorous applied field of information that its conceptual framework must reflect a scientific orientation.[98] The Educational Sciences provide this framework and includes scientific language for the applied field of education. This allows educators to articulate problems and communicate in terms of the "sciences" which will alleviate misinterpretation and fragmentation.

The PEP approach was based upon these sciences, which now includes seven areas: (1) symbols and their meanings, (2) cultural determinants of the meanings of symbols, (3) modalities of inference, (4) biochemical and electrophysiological aspects of memory-concern, (5) cognitive styles of individuals, (6) teaching styles, administrative styles and counseling styles, and (7) systemic analysis decision-making. Specifically cognitive style mapping is based on the first three of these educational sciences, which can be summarized as follows:

---

[98] Floyd W. Radike, ed., Handbook for Teacher Improvement Utilizing the Educational Sciences (Bloomfield Hills: American Educational Sciences Association, 1973), p. 1.

Symbols and their meanings.[99] Two types of symbols, theoretical and qualitative, are used by individuals to acquire knowledge and derive meaning from their environments and personal experiences. Words and numbers are the most common form of theoretical symbols while the qualitative symbols are associated with man's auditory, visual, tactile, savory, and olfactory senses.

Theoretical symbols are of two main types, auditory and visual, each of which can be divided into linguistic and quantitative elements. Appendix B provides a list of theoretical symbols and their meanings.

Qualitative symbols are derived from three sources: (1) sensory stimuli, (2) programmatic effects, and (3) cultural codes. Qualitative symbols and their meanings are listed in Appendix B.

Cultural determinants.[100] The science of cultural determinants considers the individuality, associates, and family of the person. It is through these determinants that cultural influences are brought to bear by the individual on the meanings of symbols.

A person's individuality, which begins developing very early in life, results in a person using his own influence to derive meaning. This influence is frequently reflected by the individual's need to quote definitions, or explain situations, in his own words. This type person could work alone in a learning situation and would probably resist a team approach.

---

[99] Joseph E. Hill, The Educational Sciences, op. cit., pp. 4-5.

[100] Ibid., p. 5.

The associates determinat shows the influence on the meaning of symbols derived from a person's peer group or those with whom he associates. The person who derives meaning in this way would probably prefer group activities and would not make decisions without consulting an associate.

The family determinant stems from the influence of those a person considers to be his family. A person who portrays the family determinant could possess values congruent with those of his family and frequently quote parents' views. He would relate and interpret events in terms of family experience, would adjust his life style to family's needs, and would tend to follow family tradition. Cultural determinant symbols and their meanings are provided in Appendix B.

Modalities of inference.[101] The science of modalities of inference is concerned with the diverse methods of mediating into meaning theoretical and qualitative symbols whose meanings are influenced by individuality, associates, or family cultural determinants. This is the process of drawing conclusions and making decisions. Man can draw conclusions by utilizing the inference processes of magnitude, difference, relationship, appraisal, and deduction.

Magnitude is a form of reasoning that utilizes categorical classifications. Persons who need to outline materials in order to understand them reflect this modality. This person requires specific directions, adheres to rules and regulations, is willing to memorize dates, and will make quick decisions.

---

[101] Ibid., p. 6.

Difference is a modality that implies reasoning in terms of contrasts or comparisons. A person utilizing this mode requires presentations and materials that provide opportunities to contrast the topic being studied. He needs to see how a concept is different from others.

Relationship is a modality that indicates the ability to reason by considering a relationship between two or more characteristics or measurements. A person with this modality strives to see interconnections, and cause and effect relationships.

Appraisal is a form of modality employed by an individual who uses magnitude, difference, and relationship, giving equal weight to each, in his reasoning process. He makes an analysis of all factors before accepting a concept or making a decision, is slow to reach a decision, and sees exceptions and alternatives.

Deductive inference is a modality that indicates deductive reasoning. The person utilizing this modality proceeds from known to unknown in a logical manner. Appendix B provides a list of symbols and meanings for modalities of inference.

A copious review of the literature coupled with a firm grounding of the undergirding theories associated with the major issues contributed to the development of the student-centered program. The next chapter will propose an administrative management model which consists of components dealing with development, staffing, organization, implementation, supervision, and evaluation design of this program.

Chapter 3

ADMINISTRATIVE MANAGEMENT MODEL

This chapter contains the steps that an administrator must follow to install and manage a student-centered program in a community college. This model is the product of knowledge gained from relevant literature and actual experimentation. The model outlined in this chapter is based on the evolution of a WAGS Program presently in operation at Polk Community College.

The management strategies and techniques utilized in this WAGS-type Program employ the problem-solving approach. This technique incorporates group participation and involves the application of the scientific method of analysis and synthesis in the decision making process. This task is accomplished by incorporating an advisory committee to assist in the management of the innovative program.

For an institution to achieve its purposes it appears that any administrative organization must carry out two vital functions: (1) it must solve problems, and (2) it must achieve coordination. The process through which these functions are achieved is communication. The advisory committee was chosen as a vehicle to achieve these functions due to the fact that an effective committee can keep communication lines operational, can enhance the efforts of effective individuals, can protect against arbitrary and inappropriate decisions of a few and can reduce the likelihood of the development of problems of such a nature as to impair the effectiveness of institutional purpose.

Administration is primarily a co-ordinating activity. Tracz states that when a person performs an administrative act, he is chiefly concerned that the various elements under his jurisdiction harmonize into a workable goal-directed unit.[1] The administrative function can effectively be carried out with a well selected and organized committee. The committee will be discussed in greater detail in the first component of the student-centered program model.

It is first of all essential to understand that this model is designed to assist the community college administrator in dealing with a new program. The installation of a new program can be a difficult and time consuming task. However, this model (based on field testing and someone else's mistakes and successes) could make the task of curriculum innovation much easier.

It is not the intent of this model to be a rigid guide; rather a model to be used as a guideline to be adapted to local situations and local institutions.

The model is broken down into six major components: (1) development, (2) staffing, (3) organization, (4) implementation, (5) supervision, and (6) an evaluation design. The model is shown schematically in Figure 1.

DEVELOPMENT

This component of the student-centered model deals with planning and defining strategies necessary for the installation of a program of this type and includes all preliminary activities. The strategies

---

[1] George Tracz and Wayne Burtnyk, "Educational Administration, Planning, and Management," Education Canada, 12:45, March, 1972.

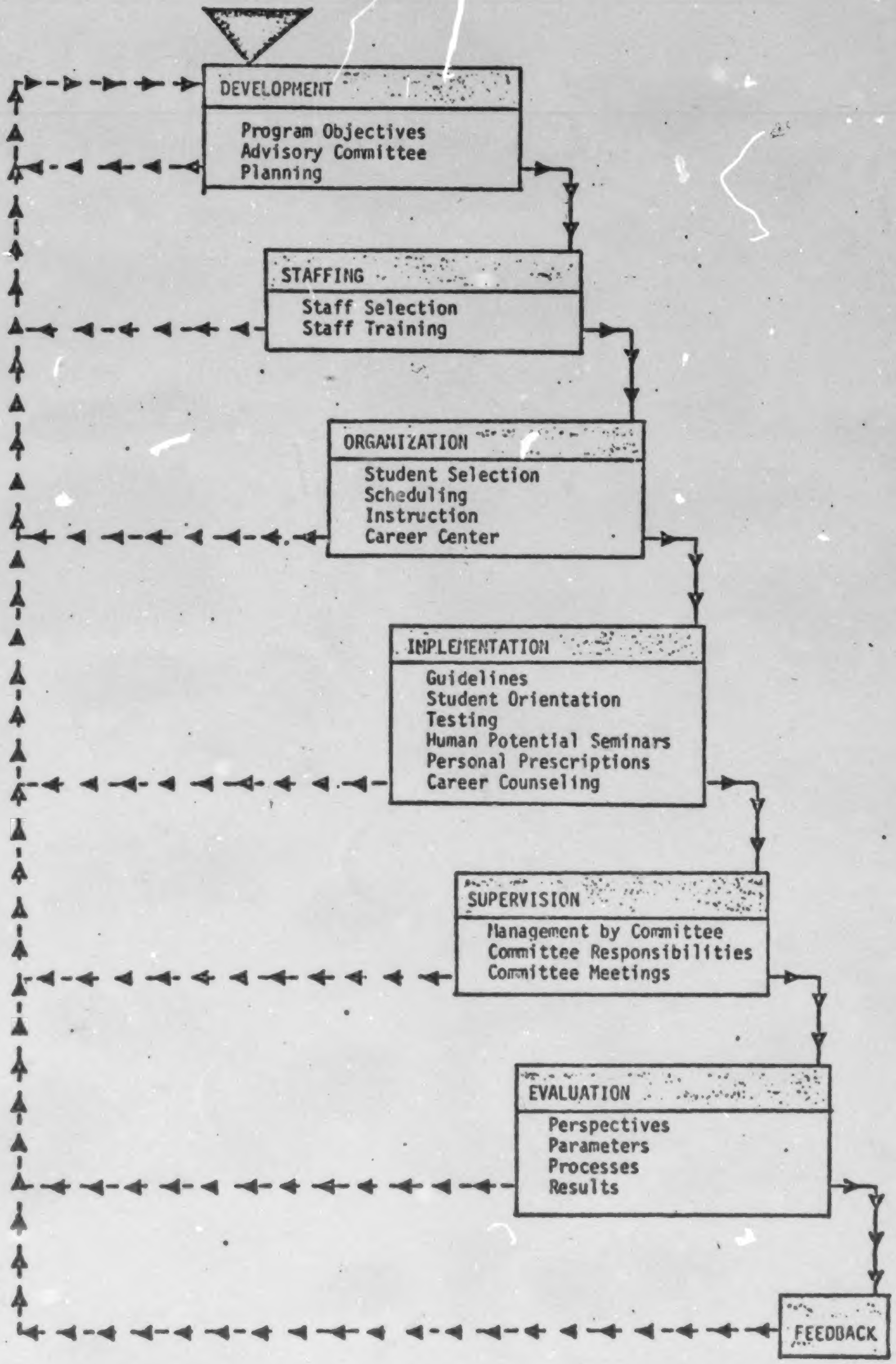

DEVELOPMENT
Program Objectives
Advisory Committee
Planning
STAFFING
Staff Selection
Staff Training
ORGANIZATION
Student Selection
Scheduling
Instruction
Career Center
IMPLEMENTATION
Guidelines
Student Orientation
Testing
Human Potential Seminars
Personal Prescriptions
Career Counseling
SUPERVISION
Management by Committee
Committee Responsibilities
Committee Meetings
EVALUATION
Perspectives
Parameters
Processes
Results
FEEDBACK

Figure 1

Student-Centered Program Model

employed in the development of this model include ten dimensions as illustrated in Figure 2. The first step in the accomplishment of this task is to define the program objectives.

Program Objectives

It is doubtful if any one program or any one set of objectives will fit the needs of any institution. Therefore an administrator must choose a program that shows promise and appears commensurate with institutional philosophy and adapt it to conform to local needs. Broad objectives are usually dictated by society and each college must translate these broad objectives into specific objectives as well as formulating ways to reach the objectives. The following objectives are suggested for a student-centered program.

1. The program is a flexible program to effectively serve the open-door college environment.

2. The administrative use of an advisory committee (composed of administrators, teaching faculty, counseling staff, and students) will ensure a coordinated and effective team effort.

3. The program will serve the diverse student educationally, socially, and emotionally.

4. Students who are unmotivated, undecided, or unprepared are involved.

5. Training of program staff and other personnel interested in the Educational Sciences and Human Potential Seminars will occur.

6. Materials are developed and/or purchased to implement the Educational Sciences concept in the program courses.

7. Evaluation of the total program by students and staff will take place in order to plan future program changes.

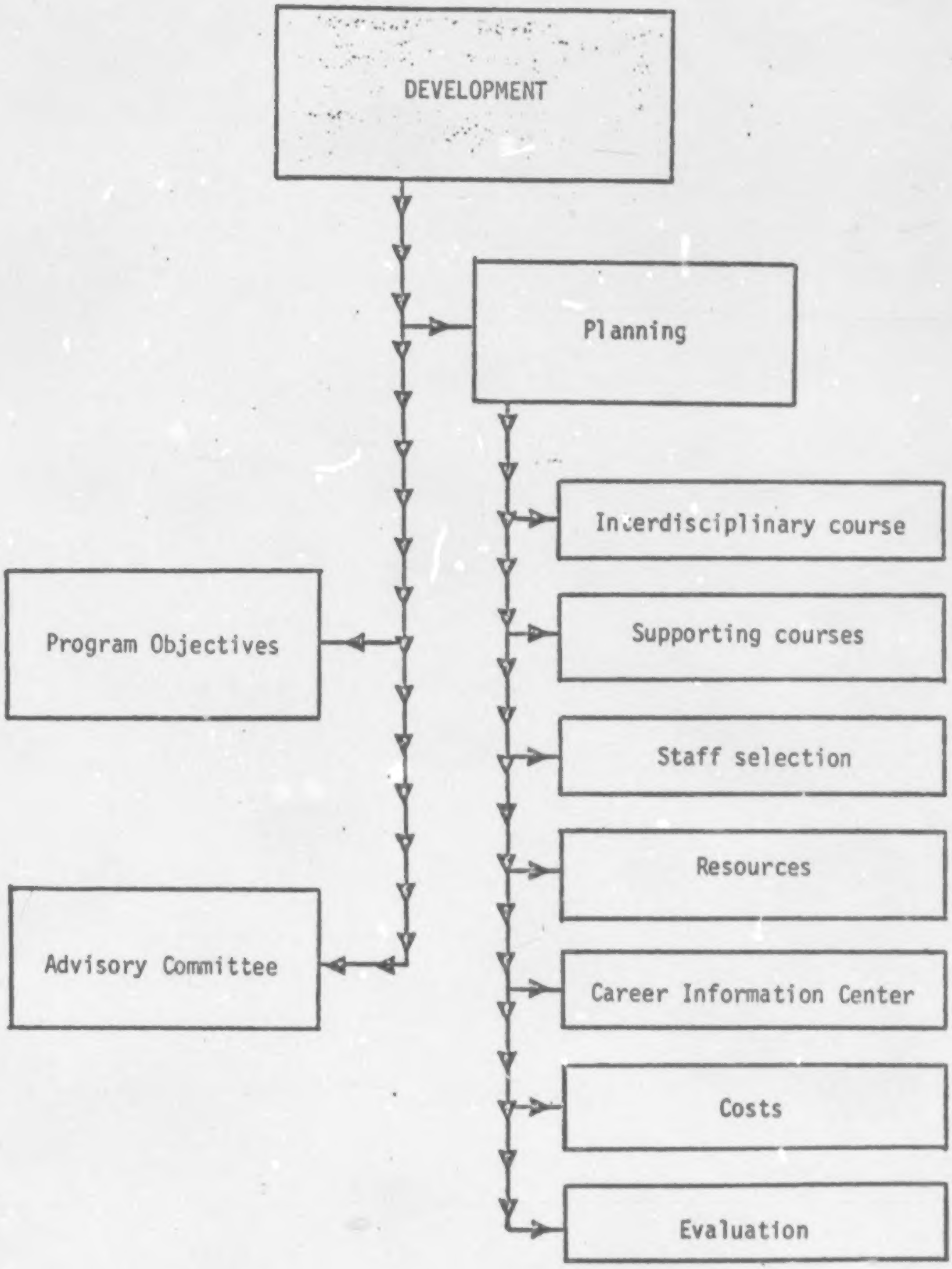

DEVELOPMENT
Planning
Interdisciplinary course
Supporting courses
Staff selection
Resources
Career Information Center
Costs
Evaluation
Program Objectives
Advisory Committee

Figure 2

Development Component

Program objectives and program installation can best be accomplished through collaboration. To achieve the program objectives and facilitate program installation, utilizing a collaborative approach, an advisory committee is recommended.

Advisory Committee

Problem-solving today encompasses negotiations and collaborative approaches in the decision-making process. It is essential that students and staff be involved if changes are to receive the necessary support. This is especially true in the installation of a new program. Too often new programs are not successful due to the fact that planning and decisions are made by the top officials without consulting those who will be operators and consumers of the program.

The ultimate success of the program depends upon its acceptance and support by administrators, counselors, faculty, students, staff, parents, and community. It is recommended therefore, to include as many persons from these interests groups as possible. It is important that individuals volunteer and not be forced to serve on the committee. The committed volunteer will be more likely to work toward successfully establishing a new program than one who is "volunteered." If people are given the opportunity to participate in the planning and development of a program they will be more likely to accept and work effectively with the program.

A well balanced committee can also assist in the following ways:

1. By eliminating clique membership and therefore eliminating clique resistance which results in a group effort.

2. Staff members who are good at studying problems and providing alternative recommendations should be on the committee.

3. The committee is an excellent way of involving additional people in planning and decision-making.

4. When students are allowed to serve on a committee and participate in the planning of the learning process, the participation creates an interest which results in student support.

5. When students fully understand and agree with the objectives of a program, they will be motivated to learn.

6. Student feedback can be extremely helpful in modifying and improving the program.

After a well-balanced advisory committee has been formed, a chairperson must be selected. It is suggested that this person not be an administrator. A teacher, for example, would make a superior chairperson for several reasons:

1. The teacher can be a source of support from fellow teachers.

2. Advice is solicited from other teachers, counselors, and students more freely.

3. The teacher is better able to understand the problems of the instructional process.

4. A teacher will not be viewed as an outsider or a threat to security and freedom.

Once the advisory committee is organized, weekly meetings should be established and all phases of the installation should be under the auspices of the committee. It is obviously of the utmost importance that those on the committee become totally involved in the planning of the program.

Planning

According to Henderson planning must involve analysis of objectives, analysis of materials and methods to be used in achieving the objectives, and preparation of a plan of action which results from a synthesis of the analysis.[2] Utilizing Henderson's logic, the following list contains a sample of the items which the committee should consider in the early planning stages:

1. Analyze needs of the population to be served.
2. Explore and/or observe programs already in existence.
3. Research and/or review current literature.
4. Consider a new program in terms of objectives, goals, and institutional needs.
5. Decide if the program is commensurate with the philosophy of the college.
6. Determine student interest in the proposed program.
7. Decide if the new program is adaptable to the institution.
8. Consider the existing instructional practices that need to be replaced or modified.
9. Consider the additional cost.
10. Determine what part of curriculum the new program will replace or supplement.
11. Determine what additional instructional facilities and equipment will be needed.
12. Gain the support of all interest groups.

---

[2] Algo D. Henderson, The Innovative Spirit (San Francisco: Jossey-Bass, Inc., Publishers, 1970), pp. 176-178.

13. Identify appropriate knowledgeable individuals who might work with the program.

14. Before decisions are made to adopt a new program circulate information regarding the program to the faculty. Point out concepts and techniques.

15. Allow faculty sufficient time to discuss pros and cons.

16. Consider internal opposition.

17. Plan strategy for coping with individual or group resistance.

18. Identify cliques and involve them.

19. If opposition exists prepare case by demonstrating:
    a. A need for the program.
    b. How it will benefit students.
    c. How it will benefit the teachers.
    d. How it will benefit the college.
    e. How it will benefit the community.

20. Consider meeting with the faculty to answer questions and ascertain the faculty's desire to investigate in greater detail by experimenting with a small group the first year.

21. Determine the number of students to involve in the program. It is recommended that the first attempt be limited to not more than sixty students.

22. Consider external opposition such as community reaction to change.

23. Notify the news-media.

24. Inform the college board of trustees.

This list is far from being complete but it contains those items which must be considered first. Once the decision has been made to install a student-centered program, the next step requires a closer look at the actual program development.

The purpose of a program such as this WAGS-type Program is to create a flexible yet integrated structure which will allow students to make the best use of their experiences. To house the main techniques (Human Potential Seminars, Personalized Educational Programs, and Career Planning) it is essential that a new course be developed. This course is the core of the student-centered program with other complementary courses selected to make a well-rounded program. It is recommended that this course be an interdisciplinary one taught primarily by counselors but in close cooperation with the instructional staff.

Interdisciplinary course. The committee should be involved in the total development of this core course. A request should be prepared for the curriculum committee which includes a history and rationale for the course, a well-defined proposal, and a complete course description. Appendix C outlines the proposal used at Polk Community College to create an interdisciplinary course for the WAGS Program.

Supporting courses. After approval of the core course the committee should select the courses from the various disciplines which will complement the core course and insure a well-rounded program. These courses will differ from institution to institution. The courses used in the PCC WAGS Program are listed in Appendix D.

Supporting courses should be general enough to fit into most any program. This is essential because students in this type program are usually undecided about their future and should be given courses which will apply to most any field of study. It is suggested that during Term II students be allowed an additional elective course because hopefully by this time many students will have a better idea of what they want to do. Electives should also be recommended (in occupational and transfer courses) which are taught by instructors trained in the Educational Sciences.

After identifying the supporting courses to include in the new program, the committee must now plan for staff selection and training.

Staff selection. This step is a very critical one which merits consideration in the early planning stages. This topic will be treated more in detail in a later component of the model. However, the following items should be considered at this point:

1. Attempt to secure teacher and counselor volunteers.
2. Be sure that teachers and counselors understand the requirements of the new program and that classroom instructional styles will have to be altered.
3. Involve department heads and division chairmen.
4. Plan for a consultant to visit the campus and expose those who have volunteered to the Human Potential Seminar and Personalized Educational Programs techniques. There should be a clear understanding of the new techniques and their implications.
5. Eliminate those who express doubt or an unwillingness to participate after working with the consultant. It is less costly to eliminate via exposure to consultants than to eliminate via more expensive workshops.

6. Plan for workshops and inservice training. Workshops will be discussed more in detail in a later component.

At the same time the committee is involved in planning for staff selection they must also be thinking of resources.

Resources. The initial items for the committee to consider in relation to resources are:

1. Determine appropriate equipment, materials, and supplies required by the instructional program.
2. Plan for the purchase of necessary equipment and materials.
3. Establish a plan for maintenance of equipment.
4. Plan for facilities necessary for the instructional program.
5. Determine where equipment, materials, and supplies will be housed.

Resources and their utilization will be discussed in more detail in a later component.

The career information center should also be considered in the early planning stages to allow sufficient time for delivery of materials.

Career information center. Since career planning will be an integral part of the new program, provisions must be made to collect career information materials and plans must be initiated to establish a central location to house these materials. The first step is to determine what exists on campus at the present and what needs to be ordered to enable counselors to provide adequate career information. Most colleges already have an adequate career information center.

Program planning must focus on costs and how much to include in the budget for the new program.

Costs. For the last twenty years colleges have enjoyed prosperity. Universities and colleges are now accused of inefficiency in curriculum, staffing, and use of space. The problem now is to meet the needs of students with possibly a smaller budget. Administrators nationwide are faced with cutting costs and making the budget balance without sacrificing the instructional program.

According to Jellema the approach to solving this problem is to improve operating efficiency. He states that efficiency is measured as a ratio between two variables, cost and output.[3] If colleges are to become more efficient, they must increase the ratio of students who complete courses. The student-centered program is designed to cope with this problem and raise the educational efficiency by motivating students, reducing attrition, and increasing performance.

It is not the intent of this section to develop a budget for the administrator using this model. Too many variables exist from college to college and state to state. However, the following suggestions are offered for the committee to utilize when planning for the development of a new program.

1. Consider accountability of people, time, resources, and materials.
2. Budget for consultants.
3. Budget for workshops and inservice training.
4. Calculate costs of additional materials and special equipment required for the implementation of the program.
5. Figure costs of testing fees.

---

[3] William Jellema, ed., Efficient College Management (San Francisco: Jossey-Bass, Inc., Publishers, 1972), p. 80.

6. Budget for released time for teachers for materials development.

7. Budget for substitute teachers while program staff members attend workshops or inservice training sessions.

The amount of additional money required for a program of this type could be minimum. It depends on whether the college has existing budgets to cover testing, consultants, materials, and supplies. A successful operation with a minimum budget calls for instructors, counselors, and administrators to devote a few extra hours each week for committee meetings, planning, serving as Human Potential Seminar group leaders, prescription writing, and evaluating. Many colleges have S.P.D. funds which can be used for this type of operation.

Planning must also include sufficient strategies for evaluating the program.

Evaluation. The roles of evaluation are numerous including predictions, selection, assessment, diagnosis, refinement, conclusions, decisions, and recommendations.

Tuckman describes three types of evaluations: (1) individual evaluation, (2) formative evaluation, and (3) summative evaluation. He defines individual evaluation as the monitoring of the performance of each individual student, formative evaluation as an attempt to evaluate objectives to provide improvement in the ongoing instructional program, and summative evaluation as the over all evaluation of the final program.[4]

---

[4] Bruce W. Tuckman and Keith J. Edwards, "A Systems Model for Instructional Design and Management," Educational Technology, 11:23, September, 1971.

The last component of the model is an evaluation design for the program. However, the advisory committee should consider some items in the early planning stages. The following suggestions are offered:

1. Determine what pre- and post- instruments will be needed.

2. Plan for appropriate evaluation techniques that will provide a check on continual effectiveness of the program.

3. Establish a system to provide continuous feedback on the program.

4. Provide for evaluation of each individual student's progress in terms of goals.

5. Maintain proper contacts with program staff to determine strengths and weaknesses of the program.

It seems obvious that the development component of the model must be broad and general in order to build the proper foundation for a meaningful program. The second model component focuses on the task of staffing the program.

STAFFING

The staffing of the program could be the major key in creating and effective program in keeping with the community college philosophy and goals. Certainly the quantity and quality of the staff not only are crucial elements but also in a sense indicate the value the college assigns to the program. The staff is the second important group to be chosen by the administration, the first group being the advisory committee. The advisory committee works with the over-all program but teachers and counselors are the ones who work directly with the students.

For this reason the teachers and counselors will be the focus of this component on staffing. This component is illustrated in Figure 3.

Staff Selection

Instructors and counselors chosen for the program must be selected with a wide range of abilities to ensure a balance. For example the staff should possess expertise in areas of English, history, mathematics, reading, science, media, advising, and counseling.

Cohen points out that most literature on faculty includes only normative data such as academic background and previous work experience and that only recently has some attention been given to two-year college instructors.[5] Nevertheless, a fairly extensive list of characteristics was compiled which should be considered when selecting a staff to work with a student-centered program. The following criteria should be given serious consideration when selecting the staff. The staff should be:

1. Receptive to change and willing to innovate.
2. Sensitive to student attitude and personal needs.
3. Competent in recognizing, understanding, writing, and evaluating objectives.
4. Sincere and in agreement with the tenets of the program.
5. Willing to undergo training in the Human Potential and Educational Sciences techniques.
6. Amenable to suggestions and criticism.
7. Inclined to experiment with new techniques and methods knowing in advance that some might not be successful.

---

[5] Arthur M. Cohen and others. A Constant Variable (San Francisco: Jossey-Bass, Inc., Publishers, 1971), p. 33.

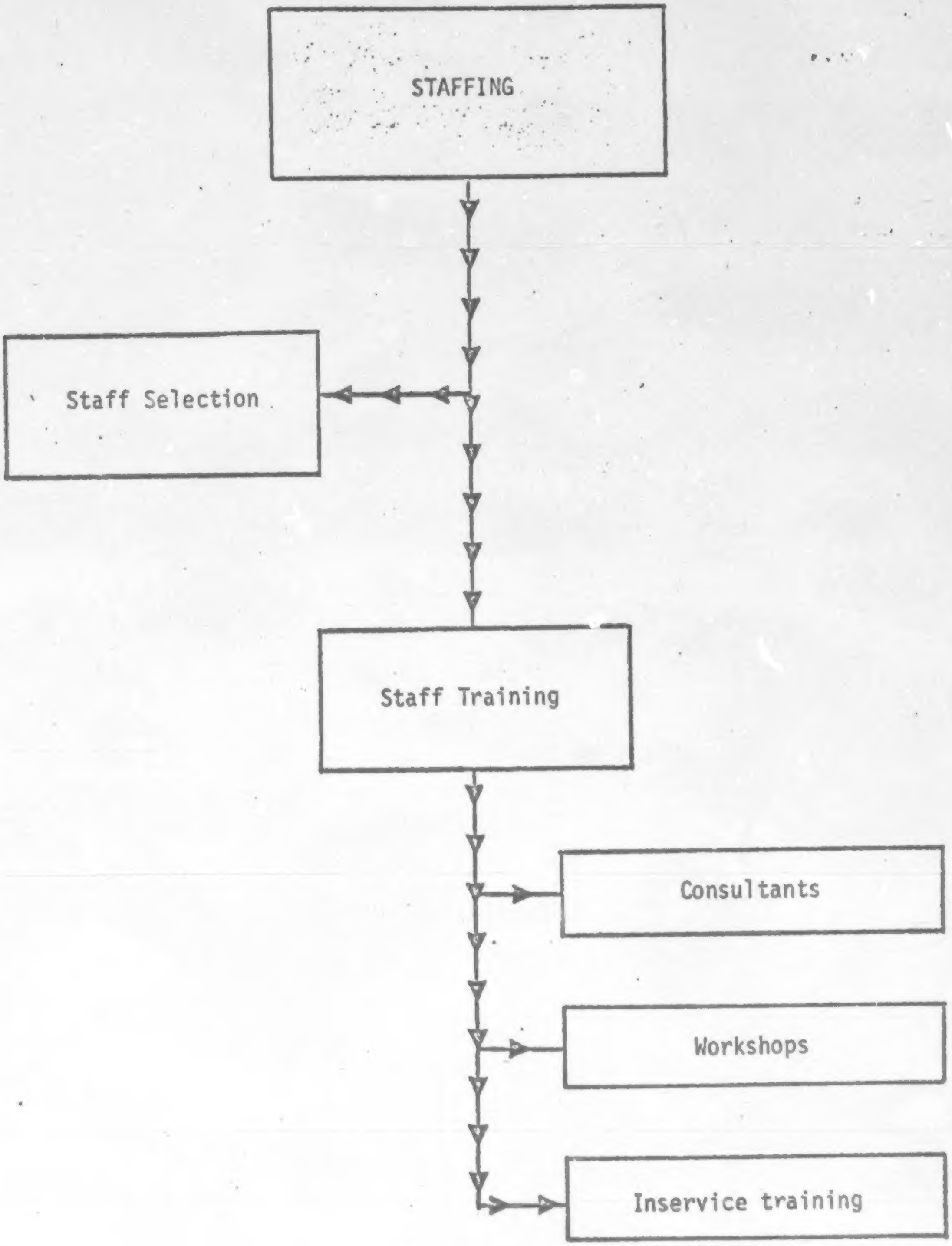

STAFFING
Staff Selection
Staff Training
Consultants
Workshops
Inservice training

Figure 3

Staffing Component

8. Willing to work as a member of a team.

9. Endowed with a variety of personalities, experience, and temperament.

10. Enthusiastic about the program and willing to spend hours of extra time.

11. Adept in conducting studies and providing alternative recommendations.

12. Qualified to teach the necessary instructional content.

13. Tenacious and possess a high degree of self awareness.

14. Willing to work with unmotivated and unprepared students.

15. Sensitive and subjective.

16. Empathetic and capable of maintaining a positive attitude.

17. Proficient in dealing with individuals and small groups.

18. Knowledgeable of the dynamics associated with classroom interaction.

19. Accessible to students needing individual attention.

20. Eager to provide a candid and honest classroom atmosphere.

21. Willing to assist in the program evaluation.

The major thrust of staffing is the selection of teachers and counselors with the expertise required to provide relevant educational experiences which will facilitate the teaching-learning process.

After the proper number of staff members have been selected, they must then be trained in the techniques employed in the student-centered program. This is an extremely important aspect of the model since the Human Potential Seminars and the Educational Sciences will probably be new to the selected staff members.

Staff Training

The staff must be prepared for changes required by the new program. Innovation means that comfortable routines will be altered and possibly changed completely. The very idea of change is threatening to most and may cultivate insecurity. This can be avoided through the use of consultants, workshops, and inservice training. Appendix E suggests sources of consultants and workshops.

Consultants. Consultants are recommended as a technique for giving moral support, helping to define needs and to work through problems. An outside person will provide legitimacy to the program in addition to contributing real expertise. He can provide an objective perspective as well as valuable source to aid in solving problems. The proper consultant can generate an atmosphere of openness to receive new ideas, relieve suspicions of hidden motives, provide tangible evidence to nurture innovation, and minimize threat of change.

Workshops. Workshops should include administrators, counselors, and faculty since the program installation depends upon the support of all interest groups. It is essential for administrators to receive the training because after implementation they will be required to supervise, evaluate, and explain the program that is in operation in their college.

Workshops provide instructors an opportunity to practice new methods safely and to prove that they can handle the new challenge.

The Human Potential Seminar and Educational Sciences techniques are so unique and punctilious that they should not be used by those who have not been well grounded in their utilization. The success of this student-centered program depends on how the Human Potential Seminar process is employed, whether staff members are trained in reading and interpreting student maps, and how effective they are in the design and implementation of various educational approaches to accomodate a variety of individual cognitive styles.

Workshop experiences should be carefully planned with ample opportunity for each person to actively participate and should be run only by those who are certified to operate workshops in the Human Potential Seminar and Educational Sciences techniques. If a program is to be installed in the Fall term, a spring or summer workshop should be held with an additional inservice workshop during the Fall term. Appendix F provides an outline of a spring workshop attended by the PCC staff. Appendix G illustrates a fall workshop sponsored by PCC.

Inservice training. Inservice training is a vital consideration due to the drastic departure from conventional instruction. Students will be diverse in terms of their motivation, experiences, interests, and needs. Map interpretation and augmentation in the individualization process becomes a critical factor. In order to accomplish individualized instruction, the instructor must be able to efficiently read student maps, examine and explore the various problems, techniques, and materials and prescribe accordingly. This requires skills which must be developed over a period of time.

Inservice training scheduled throughout the year not only provides for skill development but strengthens group commitment, produces a feeling that problems are shared by everyone, enhances staff security, builds confidence, and ensures that the proper perspective is maintained.

Inservice training sessions can be used to involve faculty members who have become curious about the program and express a desire to understand the techniques of the new program. This is a good method of training a back-up staff which could be utilized in the future. Additional faculty and counselors should be trained in preparation for expansion of the program beyond the initial stage. Spring and summer inservice sessions at PCC are described in Appendix H.

Probably the most valuable and least expensive method of staff development is to arrange for instructors to visit colleges with a similar program in operation. This helps to build faculty confidence and motivates the staff to take advantage of consultants, workshops, and on-campus inservice training.

The next component in the student-centered model suggests steps to follow in organizing the new program.

ORGANIZATION

The scheme employed in the organization component of the student-centered model, Figure 4, includes five areas. This component is a critical one which bridges the installation operation. The strategies employed in this phase are dependent on the foundation and preparation accomplished in the first two components.

Working with the advisory committee, the administrator should analyze this operation with a view toward an orderly structure in which each function is identified. Each identified function should then be assigned to staff members outlining specifically their responsibilities in the organization process. These assignments will have to be made based on the expertise of each staff member employed in the program.

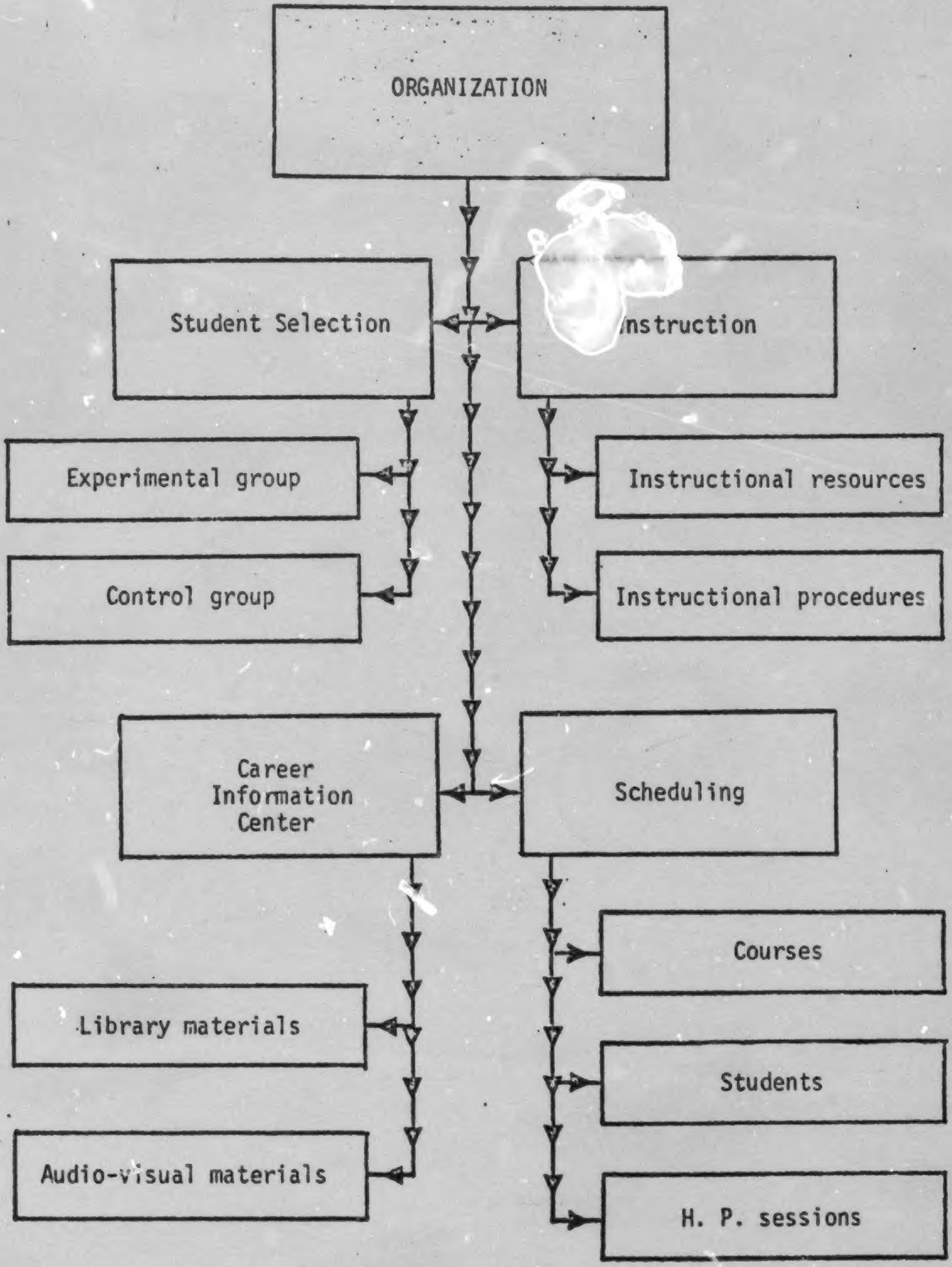

ORGANIZATION
Student Selection
Instruction
Experimental group
Control group
Instructional resources
Instructional procedures
Career Information Center
Scheduling
Library materials
Audio-visual materials
Courses
Students
H. P. sessions

Figure 4

Organization Component

The first area to consider in this component is the selection of students for the program.

Student Selection

The student selection process should begin during the Spring when applications for the Fall are accepted. The staff member assigned the responsibility of selecting students for the program should apply the selection criteria to each application and isolate those students who appear to be candidates for the student-centered program.

Using the same criteria an experimental and a control group should be chosen. It is suggested that at least fifty percent more students be identified than will be required for both groups. This will provide substitutes for those who fail to register or refuse to become involved in the program. Even though this model has been field tested, each institution should utilize experimental and control groups since each installation will be an adaptation of this model which could produce different results. The evaluation design in the last component discusses the treatment of these two groups.

Experimental group. The experimental group will consist of all the students in the student-centered program. The following selection criteria are suggested:

1. Students who are undecided about their college program. The undecided student will usually enroll in a general program.

2. Students who appear to be unmotivated. This student shows a general lack of interest.

3. Students who have unrealistic goals. This student may have low achievement test scores but wants to be a physician.

4. Students who appear to be unprepared for college. This student may have low grades on his high school transcript.

5. Students who are underachievers. This student may have test scores which indicate greater potential.

6. Students who avoided extra curricular activities in high school.

After the required number of students have been identified, letters should be sent to a random number inviting them to become a part of the new program. Those responding should be given the opportunity to sign up for the student-centered program or refuse it at the initial counseling session. Appendix I illustrates the invitation letter used in the PCC WAGS Program.

Control group. The control group should be the same size as the experimental group and should be chosen from the identified population with similar characteristics. It is recommended that a matching process be used which necessitates matching each experimental student individually with a control student. According to Borg, the matching process is more effective in studies where small groups are used and when large differences between the experimental and control group are not likely to occur.[6]

The staff member assigned the responsibility of student selection will find that the matching process can be facilitated through the use of a data sheet on each student. Appendix J represents the student data sheet used at PCC.

---

[6] Walter R. Borg and Meredith D. Gall, Educational Research: An Introduction (New York: David McKay Co., Inc., 1971), p. 384.

It is suggested that the following variables be considered when matching the control group with the experimental group:

1. Age.
2. Sex.
3. Date of graduation.
4. Size of high school attended.
5. Type of high school program followed.
6. High school grade point average.
7. Graduation class size.
8. Rank in graduating class.
9. Type of activities chosen in high school.
10. Type of college program chosen.

The selection process will cover a span of several weeks. While this function is taking place it is recommended that attention be directed to scheduling.

Scheduling

This phase of the organization component involves scheduling of courses, students, H. P. sessions, and other activities related to the program.

Courses. It is expedient to work closely with deans, division chairmen, and department heads to avoid problems when scheduling courses. Obtain approval to schedule the student-centered program courses in the college schedule in a manner which will be most manageable. This will vary from institution to institution. However, when scheduling classes consider testing sessions, orientation, group sessions, cognitive style map evaluation sessions, and counseling and advising sessions. Appendix K represents the courses scheduled for the PCC WAGS Program.

Students. Since the student-centered courses are limited to those students selected for the program, scheduling is a relatively simple task. The only problem encountered is the scheduling of electives.

It is difficult to schedule all of the possible electives at a time when they would be most desirable. However, when working out a student's schedule electives should be chosen which are taught by instructors trained in the Educational Sciences. Also suggest electives which appear to be commensurate with the students interest.

For a program of this type students should not be allowed to sign up for only part of the program. While in the experimental stages students should be scheduled for all of the courses in the program or none at all.

H. P. sessions. The Human Potential Seminar sessions present scheduling problems involving facilities and staffing. Each interdisciplinary class must be divided into groups of approximately ten students for the Human Potential Seminar sessions. Ten students plus a leader and co-leader appears to be the optimum number for an ideal H. P. experience.

For each class of thirty a minimum of six leaders, including co-leaders, and two additional meeting places will be required. The additional meeting places will be required for approximately ten sessions during the term. The H. P. sessions are held once each week and should be scheduled for two hours. Appendix L provides a schedule for the H. P. sessions and Appendix M outlines the interdisciplinary course schedule used at Polk Community College and depicts how the H. P. sessions are integrated in the course.

Instruction

Involving all interest groups, the advisory committee should see that each staff member is progressing satisfactorily with his assignment. At this point all courses should be grounded with objectives, topics to be emphasized, sequence in which they will be taught, various methods of instruction to be used, variety of materials to be used, and how performance toward set objectives will be evaluated.

It is imperative that all the courses employed in the student-centered program be organized using the systems approach. This is necessary because of the Educational Sciences involvement and will become more evident in the implementation component when map interpretation and prescriptions are discussed. Flanagan points out that instructional systems involving the systems approach start out with a set of objectives and develop procedures which will enable students to achieve them.[7] This must be done for each course in the program, including support courses. Since colleges will be using a wide range of courses only general suggestions will be offered in this component. Appendix N provides a syllabus of the interdisciplinary course at PCC.

Instructional resources. Instructional resources includes all of the curricular hardware and software essential for the program. The following general suggestions are offered:

---

[7] John C. Flanagan, "How Instructional Systems Will Manage Learning," Nations Schools, 86:68, October, 1970.

1. Consider the subject matter content to be used in instruction.

2. Consider principles, concepts and ideas to be covered.

3. Determine appropriate equipment, supplies, and materials required to achieve objectives.

4. Select media most suitable for presentation of subject matter content. Media should be designed with cognitive mapping in mind.

5. Check on materials for Human Potential Seminar sessions.

6. Determine testing materials required for the first week of class:

    a. Battery of tests for Educational Sciences.

    b. A self-concept inventory (P.O.I., Tennessee Self Concept Scale, etc.)

    c. An instrument for use in career counseling such as the Strong Interest Inventory.

7. Execute final arrangements for use of the following facilities:

    a. Classrooms for instruction.

    b. Space for small groups, large groups, and tutors to meet.

    c. Independent study laboratory.

    d. Reading laboratory.

    e. Library.

Instructional procedures. This involves the methods, tactics, or procedures used in the instructional process. In this model, the instructional procedures are dictated by the students maps. This is why a variety of alternative techniques and materials are necessary. This topic will be discussed later in the implementation component.

The last dimension of this component, organization of the career information center, is extremely important.

Career Information Center

This area is one that is neglected at most institutions. In this model it is used to provide a complete educational experience by facilitating career counseling and assisting students in finding personal relevance in the careers available to them. It is essential for all students to recognize that the ultimate objective of education is preparation for the future. The Human Potential Seminar sessions include long range goal setting and life style planning which can focus on activities in the career information center. Marland agrees with this approach when he advocates relating school to the realities of the world and stressing uses of knowledge through career education to enhance both academic and vocational needs.[8]

According to Hill, the selection of an appropriate career requires self-knowledge and job knowledge. He describes self-knowledge as the assessment of one's skills, aptitudes, and learning capabilities, and job knowledge as a combination of skills required for successful performance. He also points out that a students cognitive style map can give him the self-knowledge essential to direct him to realistic career goals.[9]

---

[8] S. P. Marland, Jr., "Career Education and the Two-Year Colleges," American Education, 8:11, March, 1972.

The career information center, if properly utilized, can assist the undecided student in making crucial decisions. The center should house occupational, educational, and job training information and should reflect the needs of the community.[10]

The organization of the career information center should involve the collection of library materials and audio-visual materials.

Library materials. The following general suggestions are offered to assist in obtaining library materials:

1. Collect copies of college catalogues from major public and private colleges and universities throughout the United States.
2. Collect library materials such as:
   a. What Color is Your Parachute: A Practical Manual for Job-Hunters and Career Changers.
   b. Planning Your Career.
   c. Career Perspective: Your Choice of Work.
   d. American Trade School Directory.
   e. New York Times Guide to Continuing Education in America.
   f. Occupation Outlook Handbook.

---

[9] Joseph E. Hill and Derek N. Nunney, "Career Mobility Through Personalized Occupational Education," American Vocational Journal, rpt., October, 1971.

[10] Donald C. Burns, "Community Career Development Center," Community and Junior College Journal, 44:11, May, 1974.

g. Dictionary of Occupational Titles.

h. Health Careers Guidebook.

3. Collect career oriented literature, handbooks, pamphlets, and booklets from local business and industry.

4. Develop career files containing career information on numerous careers. Use pamphlets, booklets, and other sources and arrange according to D.O.T. numerical listing.

All Library materials should be catalogued and made available for students to check out on a short-term basis. The audio-visual materials will be the most expensive of the career information center.

Audio-visual materials. Since audio-visual materials available are varied and since those obtained should be commensurate with available funds and local needs, the following general suggestions are offered:

1. Consider occupational exploration kits.
2. Rent films such as "Future Shock."
3. Collect filmstrips on various careers available from many businesses and industries.
4. Produce video tapes depicting local career opportunities using employers from the community.
5. Tape personal interviews of people in various occupations.
6. Explore various view decks available. Some utilize overlays on a lighted screen, view cards, and microfiche cards.

The ultimate operation of the career information center should include a counselor and a secretary-librarian.

To accomplish the desired results the student-centered program must be effectively implemented.

IMPLEMENTATION

The implementation component of the model represents the "doing" phase of the program. At this juncture the development, staffing, and organization components have contributed a framework which allows the program to be put into operation. Figure 5 illustrates the areas to be considered in the implementation component.

Although much time, talent, and money has been devoted to developing objectives, programs, instructional materials, and media aids, almost no attention has been given to the problems of implementing programs. Very little can be found on what actually happens when a program is installed or what factors influence its success or failure. However, general guidelines can be established.

Guidelines

The following guidelines are intended to assist the administrator in the student-centered program implementation:

1. Work with faculty to clarify the program goals.
2. Implement the program cautiously on a pilot basis.
3. Implement the program in cooperation with a consultant to increase chance of success.
4. Establish ways to assist teachers in the new program operation.
5. Keep careful records on the implementation process, including notes on items to be modified later and collection of data necessary for evaluation.

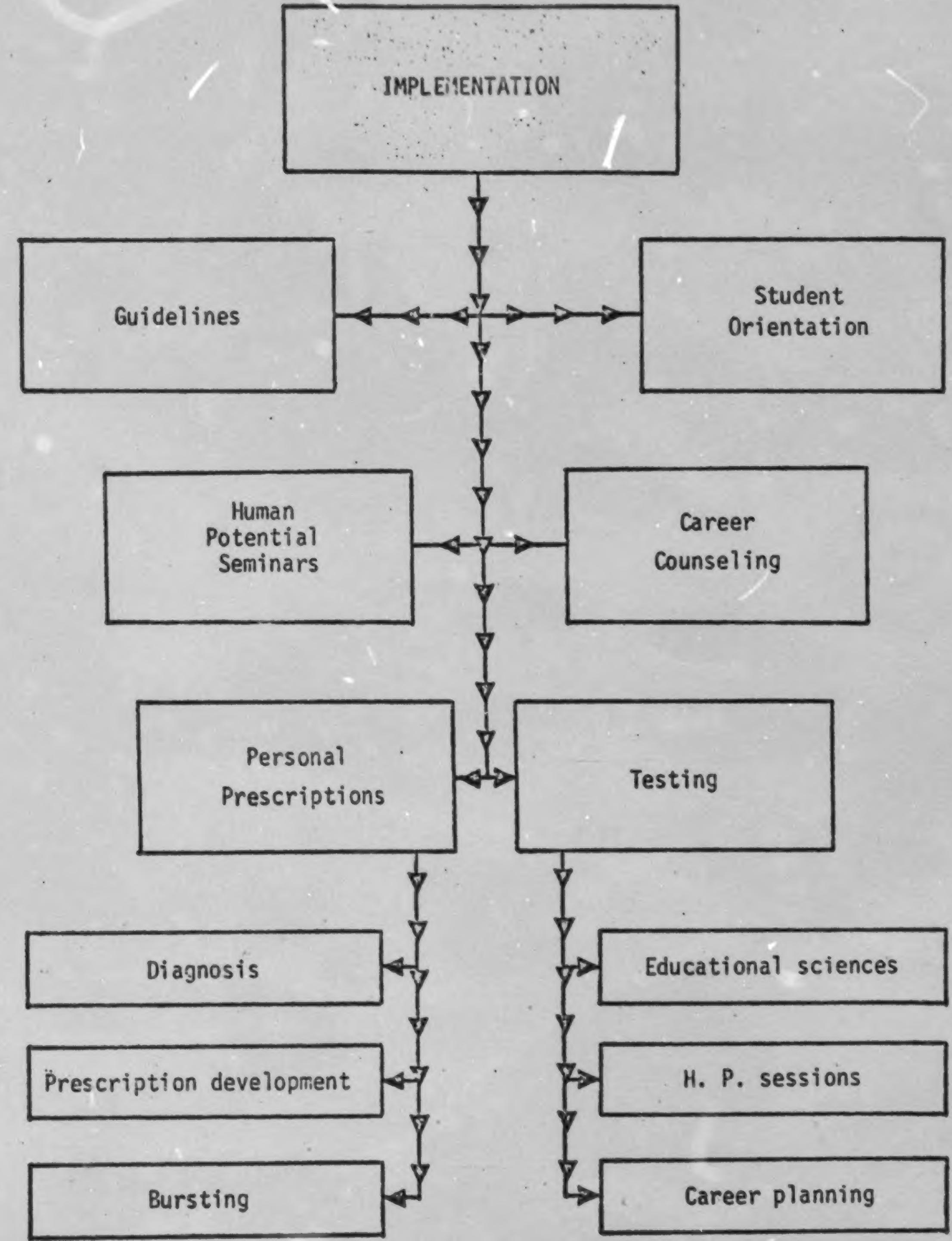

IMPLEMENTATION
Guidelines
Student Orientation
Human Potential Seminars
Career Counseling
Personal Prescriptions
Testing
Diagnosis
Prescription development
Bursting
Educational sciences
H. P. sessions
Career planning

Figure 5

Implementation Component

6. Identify crucial prerequisites to allow for an uninterrupted operation. Consider items such as:

   a. Advisory committee involvement.
   b. Staff selection and training.
   c. Program courses.
   d. Selection of students.
   e. Instructional materials and procedures.
   f. Facilities.

With proper planning and training the staff should greet the students on the first day with conspicuous enthusiasm.

Student Orientation

Even though the student-centered program was explained to the students during the admission and class scheduling process, considerable time should be devoted to orienting them to the new program. Explain the program by outlining the objectives and describing how these objectives will be accomplished. Elucidate the student's role in the program by explaining precisely what is expected of each person. Be honest and build a valuable rapport which will enhance the program.

The first sessions will be spent with tests and inventories.

Testing

During the first week of classes considerable time will be consumed administering tests and inventories related to cognitive mapping, self-concept, and career planning.

Educational sciences. The battery of evaluative instruments required to collect sufficient data for the construction of a cognitive style map demands approximately four hours. These tests measure abstractions, visual and manual coordination, response of senses, and personal characteristics. The battery includes written tests, tapes, slides, and demonstrable performances. IBM cards and answer sheets are used to collect the required data. These cards and answer sheets are mailed to Oakland Community College where a computer translates the raw data into the student's cognitive map. Allow approximately two weeks for the maps to be returned. Appendix O portrays the testing schedule used in the WAGS Program at Polk Community College.

H. P. seminars. To determine if the Human Potential Seminar sessions are effective, an instrument must be employed to measure any change in self-concept. Several instruments are available which will measure self-concept. Two examples are the Tennessee Self-Concept Scale and Shostrom's Personal Orientation Inventory.

The Tennessee Self-Concept Scale can be used for counseling, clinical assessment and diagnosis, and personnel selection. The Scale consists of 100 self descriptive statements and is available in a Counseling form or a Clinical and Research form. Scoring for both forms can be accomplished by hand or machine. Hand scoring requires about seven minutes for the Counseling form.

Shostrom's Personal Orientation Inventory is designed to measure characteristics of the self-actualized person, and can be used as a counseling tool in the one-to-one counseling setting. It can be self-administered and hand scored.

Regardless of the test chosen, it should be administered as a pre-test at the beginning of the year and as a post-test at the end of the year to both the experimental and control groups.

Career planning. Some type of instrument should be used to collect data on each student for the counselor to use in career planning, program planning, and future scheduling sessions. The Strong Interest Inventory is an example. It is machine scored and requires approximately ten days for return from E.T.S. in Princeton, N. J.

During the first two weeks of classes, while waiting for the cognitive style maps, the time should be spent with general subject matter content and initial Human Potential Seminar sessions.

Human Potential Seminar Sessions

The Human Potential Seminar sessions should begin immediately after the testing sessions. Groups of ten should be selected and assigned to a leader and co-leader. Larger groups may be required but should be avoided if possible. Large groups are usually ineffective and harder to manage. Each group should be heterogenous with regard to sex, age, achievement level, and personal interests.

Occurring concurrently with the Human Potential Seminar sessions, the students should be prepared for their individual prescription.

Personal Educational Prescriptions

Prior to the return of the cognitive style maps, instructional sessions should involve the students in the use of symbols so that the diagnosis and map interpretation phase will be more meaningful.

Diagnosis. Students should be totally involved in diagnosis and prescription development. They can begin to diagnosis their own style as soon as they start using the symbols and become familiar with traits that may appear on a map. They should become involved in empirical mapping before viewing their computer maps.

Through discussions, students begin to observe how they use symbols to solve problems and how their senses and inference processes are used. They become aware of how they search for meaning, whether they prefer to listen or read, or whether they categorize, contrast, or relate information.

When the maps are received, the diagnosis phase evolves into the development of individual prescriptions.

Prescription development. Using the student's cognitive style map from the computer, empirical map, and any other available information, the staff and the student develop a personalized educational program geared to the student's strengths and weaknesses. This becomes the student's personal educational prescription developed by matching the student's cognitive style with the available resources to ensure success for the student in his educational efforts.

Cognitive styles are not rigid. They can be augmented by building in missing strengths to complement existing strengths. Activities may be written in the prescription to augment a student's map. Prescriptions can be general or specific, depending on the map elements and whether prescriptions are used to augment minor or negligible elements.

Frequently a number of students will have similar maps. These students possess a "collective cognitive style" and may be placed in a single group.

Using the student's cognitive style and considering the modes of instruction available, it is possible to prescribe educational activities that will allow the student to "burst" into an instructional mode appropriate to his needs.

Bursting. An educational prescription for one student may call for a very different kind of instructional program than for another. A variety of instructional modes should be available.

Each student will be held responsible to achieve the objectives of his course but may "burst" into any available mode to accomplish the objectives. This process should be repeated in each course with the student and teacher working as a team.

Most "burst" activities can take place in the library, the classroom, the reading laboratory, and the independent study laboratory. Scheduled classes should remain an essential part of the instructional approach and the teachers should remain the student's primary point of reference. Appendix P suggests activities for consideration when developing personal educational prescriptions.

After individual prescriptions are written and Human Potential Seminar sessions are functioning, counseling sessions should be scheduled for career planning.

Career Counseling Sessions

The career counseling sessions should utilize feedback on each student from the Human Potential Seminar sessions along with cognitive traits found on the cognitive style map. The following steps are suggested as a basic guide for career counseling:

1. Determine if the student identified a major field of study when he enrolled.
2. Ascertain his goals at the present time.
3. Consider his chosen field of study, stated goals, and cognitive traits to determine if they are compatible.

4. Get the student to understand how he makes choices.
5. Decide how his values relate to his occupational goals.
6. Examine how his cognitive style map relates to his occupational goals.
7. Instruct the student in the use of the occupational resources located in the career information center.
8. Develop a cluster of occupations within his area of interest which require varying abilities.
9. Define the basic competencies necessary for each occupation.
10. List educational requirements for obtaining a job in each area of interest.
11. Find out expected income for each area of interest.
12. Examine job mobility.
13. Have the student consider his life style of the future.
14. Request that the student formulate a career strategy for the future.
15. Compare this career choice with the one at the beginning of the term.

The career planning sessions should be interesting and should be designed to accommodate students at different levels of decidedness. Various techniques should be employed including lectures, small group activities, slide tapes, video tapes, filmstrips, films, outside speakers, and outside projects. The career planning dimension concludes the implementation component. The next step to consider in the model is supervision.

SUPERVISION

Most educators agree that supervision of instruction is fundamentally a service function rather than an administrative or evaluative function. Teachers argue that the supervisory service should be removed as far as possible from the "line-staff" relationship. This model suggests that the supervisory function be accomplished by utilizing the advisory committee. Figure 6 represents the key areas in the supervision component.

Management By Committee

The best way to organize the efforts of individuals to achieve the desired objectives has been recognized as one of the world's most important, difficult and controversial problems. Although many people have worked hard to find better ways to supervise, progress has been slow . . . . However, research is yielding evidence that the supervisor's skill in supervising, using group methods, is increasing productivity and satisfaction.[11]

Supervision appears to be most effective in accomplishing its purposes when teachers are involved in making and carrying out plans that affect them and when the supervision technique provides an atmosphere of acceptance, support, and understanding. Supervision is also effective when it contributes to the solution of problems and when staff members are assisted in making sound judgments. The advisory committee can be used in supervision and can effectively aid the administrator as he coordinates and serves as a change agent.

---

[11] Rensis Likert, New Patterns of Management (New York: McGraw-Hill Book Co., 1961), pp. 5-26.

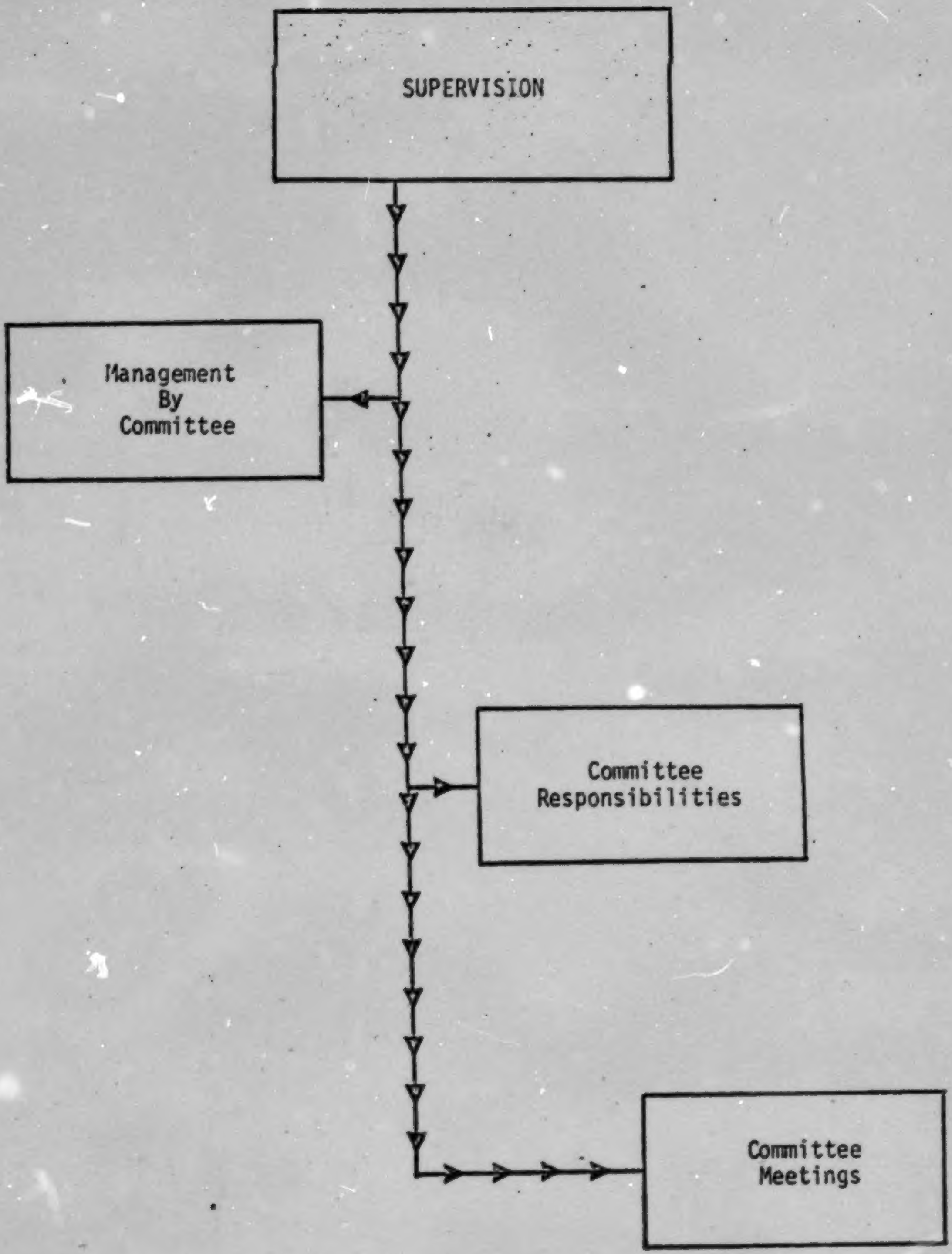

SUPERVISION
Management By Committee
Committee Responsibilities
Committee Meetings

Figure 6

Supervision Component

Achieving coordination is one of the primary goals of every administrator, . . . in administration, coordination deals with synchronizing and unifying the actions of a group so that activities of the employees are harmonious, dovetailed, and integrated toward a common objective.[12] The primary justifications for the use of a committee instead of a single individual to achieve the desired coordination are to obtain the benefits of group judgment, secure cooperation, train staff, and reach sound conclusions.

Committee Responsibilities

The advisory committee should continuously observe the operation to identify crucial prerequisites, define and redefine roles and responsibilities; and establish procedures for an orderly operation. Specifically the committee should:

1. Establish unique responsibilities for each staff member to ensure that each person is fully aware of the task for which he is responsible.
2. Establish short and long-range goals for the program.
3. Formulate policies which affect the operation of the program.
4. Make decisions which affect the program.
5. Collaborate with staff to encourage effective interaction and cooperation.
6. Serve as liaison between the student-centered program staff and other regular college staff.

---

[12] William H. Newman, Administrative Action: The Techniques of Organization and Management (Englewood Cliffs: Prentice-Hall, Inc., 1956), p. 390.

7. Establish a series of inservice activities and workshops during the year.

8. Provide consultants and supervise the activity of consultants.

9. Coordinate requests for information, presentations, or visits relative to the new program.

10. Coordinate the instructional process.

11. Monitor program implementation and ongoing operation.

12. Coordinate the acquisition of resources such as facilities, media, materials, and supplies.

13. Ensure that materials are designed for use with personal educational prescriptions.

14. Keep accurate records.

15. Collect notes on items to modify.

16. Provide for continuous evaluation and assessment of program.

17. Organize data collection to facilitate evaluation.

18. See that outcome is commensurate with program objectives.

19. Plan for program modification.

These responsibilities are varied and require constant attention. For this reason the committee should meet frequently.

Committee Meetings

To ensure the continuity of staff and program effectiveness as the program remains operational, the committee should meet at regular intervals. The committee should meet at least once each week with a specific time and place established. Additional meetings should be called as the need arises.

During the time when Human Potential Seminar sessions are in operation, additional meetings with H. P. leaders and co-leaders will be required. These meetings are necessary to compare group progress, discuss problems, explore ways to utilize cognitive style maps in the H. P. sessions, and discuss methods of utilizing student feedback in the career counseling sessions.

Committee members will be required to devote many hours to the student-centered program. It is essential that they receive the support of the college. Administration must assume the responsibility for providing resources necessary to allow members to perform their assigned duties.

The final component in the student-centered program model is a suggested evaluation design.

EVALUATION

Program evaluation requires the collection, processing, and interpretation of data pertaining to the program. This component offers general suggestions which may be used by each institution to adapt to local situations. Figure 7 illustrates the general evaluation design to be considered for the student-centered program. This component can not be specific because institutions using the model will vary greatly in program objectives, courses selected, number of classes, size of classes, methods of instruction, testing instruments chosen, and resources utilized. Therefore, the evaluation component will consist of general viewpoints which can be utilized by each institution to formulate a specific evaluation design.

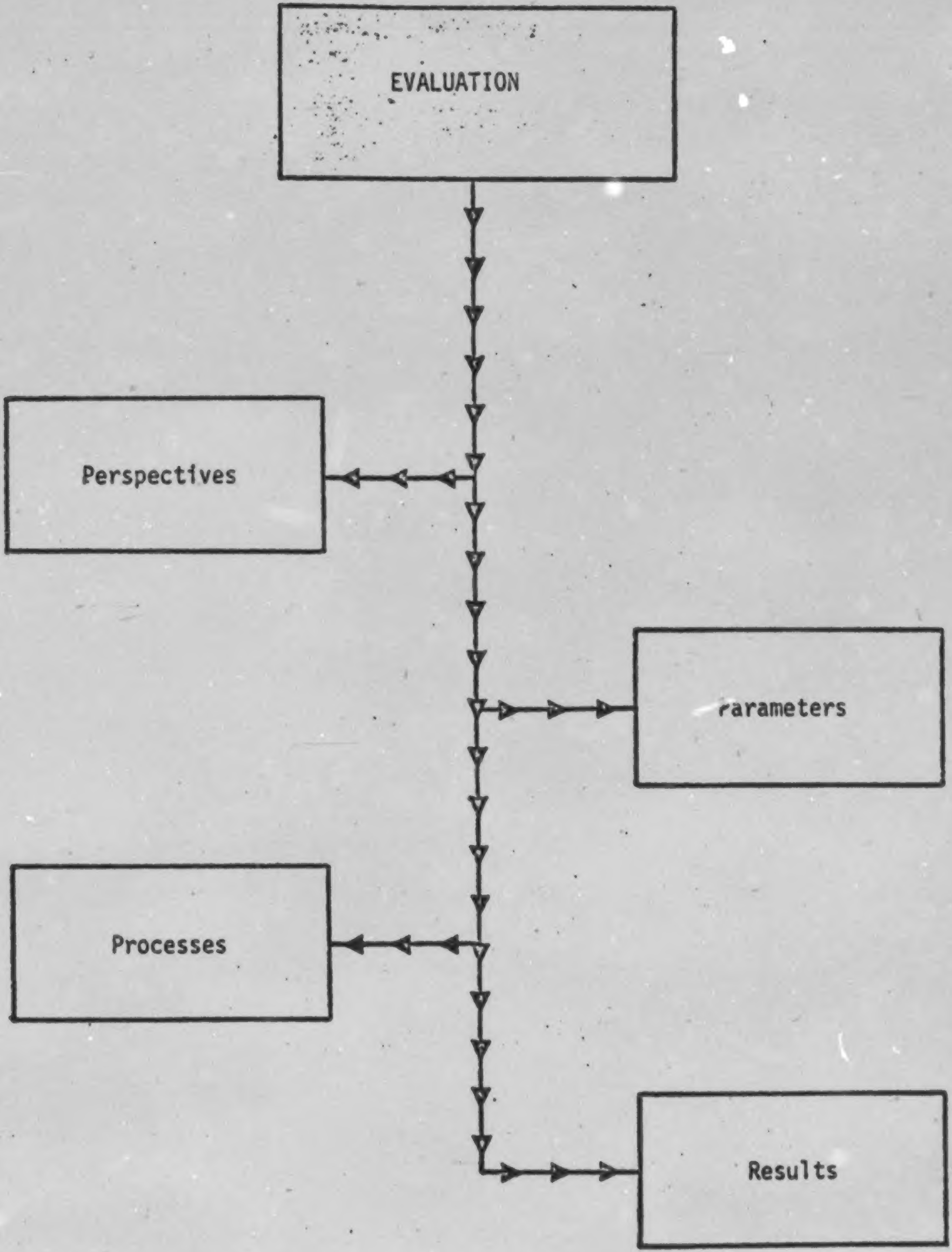

EVALUATION
Perspectives
Parameters
Processes
Results

Figure 7

Evaluation Component

Stufflebeam points out that few generalized evaluation designs exist and that educators must develop their own designs. He concludes that an evaluation design should contain a set of decisions on how the evaluation will be conducted and what instruments will be used.[13]

Perspectives

Evaluation can be viewed as the process of providing information to decision-makers in a timely, relevant, accurate, and useable form. The roles of evaluation are many including prediction, selection, assessment, diagnosis, and change. According to Dressel, evaluation has a place in all facets of the educational program.[14]

An evaluation design should be for positive, constructive purposes and should be developed to continually analyze the student-centered program. It should analyze program performance and provide a measure of how well the program served its purpose. Specifically, an evaluation design should:

1. Focus on specific performance objectives.
2. Involve staff, students, and advisory committee.
3. Become an integral part of the program.
4. Explore a variety of learning conditions.
5. Provide both verbal and statistical information.
6. Incorporate student follow-up.
7. Provide feedback for program modification.

---

[13] Daniel L. Stufflebeam, "Evaluation as Enlightenment for Decision Making," Improving Educational Assessement and an Inventory of Measures of Affective Behavior, ed. Walcott H. Beatty (Washington: National Education Association, 1971), p. 68.

[14] Paul L. Dressel, College and University Curriculum (Berkeley: McCutchan Publishing Corp., 1971), p. 213.

Individual, formative, and summative evaluations should be a part of this model. Individual evaluation is a monitoring process used by instructors to evaluate the performance of each student in each course and is employed in determining grades. Formative evaluation is any evaluation used to improve the program during development and implementation, and summative evaluation is the final evaluation of the program. This component focuses on suggestions for a summative evaluation design.

Parameters

Any decision to retain, refine, or eliminate a program should be based on results in relation to program objectives. The first step is to define the objectives that the program was reasonably expected to accomplish. The broad objectives of the student-centered program are: (1) the enhancement of self-concept, (2) the development of individualized educational programs for each student, and (3) an increased emphasis on career planning.

Specific objectives will vary from college to college. Each institution must identify specific program objectives and isolate the variables to be evaluated. The following items could be identified in most any adaptation of this model:

1. Change in values, attitudes, and behavior of students in experimental and control groups.
2. The number of students withdrawing from experimental and control groups.
3. The number of credit hours attempted and completed by students in both categories.

4. The final grade point average attained by both the control and experimental groups.

5. Changes in career choices during the year.

6. Career planning sessions, cognitive style maps, individualized educational programs, Human Potential Seminar sessions, instructional materials, advisory committee, staff, and facilities.

After the objectives have been identified and the parameters isolated, the evaluation procedures should be considered.

Processes

Every phase of the process should be examined so that effective procedures and strategies can be developed to fit the local needs. The following suggestions will aid in the evaluation process:

1. The burden of data collection and assessment should be assigned to one committee member to coordinate.

2. A balance sheet of the program's strengths and weaknesses should be developed to assist in making decisions.

3. The procedures used to gather and record information should be simple, efficient, and require minimum effort on the part of the instructor.

4. Determine appropriate evaluation techniques that are compatible with the objectives being evaluated.

5. Establish a system to provide proper feedback to the advisory committee.

The evaluation process should provide for each isolated variable to be analyzed. Statistical tests should be employed but the type of tests used will depend on the instruments selected to collect data and the kinds of data collected. The following statistical methods will probably suffice for the majority of programs:

1. The T-test of statistical significance is employed to test the significance of any difference between mean scores.[15] It could be used to treat scores on pre- and post- instruments used to measure change in values, attitudes, and behavior of students. It could also be employed to test for any difference between the mean grade point averages achieved by both the experimental and control groups.

2. The chi-square test is often used in causal-comparative relationships.[16] Several types of chi-square tests exists and their selection will depend on the evaluative instrument used. For example if Shostrom's Personal Orientation Inventory is selected to measure characteristics of self-concept, the goodness-of-fit chi-square test could be employed to find if any significant differences occur on the twelve scales.

3. Binomial hypothesis testing is a widely used procedure.[17] Different variations exist which could be used when comparing attrition rates, differences in credit hours attempted and completed, and changes in career choices made by the students during the year.

4. The Likert method is often used when obtaining information pertinent to affective variables [18] An instrument using this method

---

[15] Donald L. Meyer, Educational Statistics (New York: The Center for Applied Research in Education, Inc., 1967), p. 72.

[16] Walter R. Borg and Meredith D. Gall, Educational Research: an Introduction, op. cit., p. 312.

[17] Arnold Naiman and others, Understanding Statistics (New York: McGraw-Hill Book Co., 1972), p. 87.

[18] Julian C. Stanley and Kenneth D. Hopkins, Educational and Psychological Measurement and Evaluation (Englewood Cliffs: Prentice-Hall, Inc., 1972), p. 286.

consists of a number of statements with each statement having five possible responses such as strongly agree, agree, undecided, disagree, and strongly disagree. The responses are assigned weights and the sum calculated for each student. A high score reveals a favorable attitude, a low score, the opposite. Appendix Q illustrates the use of the Likert method on a questionnaire used at Polk Community College. A questionnaire of this type can be used to collect information on specific elements of the program, instructional methods and materials, and staff.

After the evaluation design is put into operation the results should be carefully documented.

Results

Results should be fed back to the advisory committee for the guidance of program modification. Tables, graphs, and charts should be used to assist in interpreting the evaluation findings. The results should help the committee answer questions such as:

1. How well did the experimental students perform?
2. What are student's attitude toward program?
3. How satisfactory were textbooks, instructional materials, media materials, and facilities?
4. What additional inservice activities are needed?
5. How well did the staff perform?
6. Were instructors over-worked?
7. Were students selected properly?
8. What barriers limited success?
9. Did the program provide for faculty growth?
10. Was cost excessive?
11. Were program objectives accomplished?

These questions and others considered by the advisory committee will enable them to determine if the student-centered program has evolved to the point where evidence indicates that the program objectives are being accomplished. Decisions should then be made on whether the program should be continued, modified, expanded, reduced, or deleted.

This model, when properly adapted to a specific institution, will enable an administrator to exercise his leadership role as a change agent by providing the undecided, unmotivated, and unprepared student a student-centered program designed to promote success. This model is designed to aid the educational administrator in his leadership role (setting desirable objectives) as well as his management role (discovering efficient procedures to accomplish objectives.)

The model is structured to allow the administrator to function as a change agent and utilize his leadership ability by incorporating the problem-solving and collaborative approach. The use of the advisory committee, composed of all interest groups, employs the premise that administrative leaders should be involved in all phases of program installation.

The management strategies in the model are outlined from an administrator's point of view and approach innovation in a positive fashion.

Chapter 4 will present conclusions, recommendations and implications based on the experimental WAGS Program in operation at Polk Community College and the literature research employed to develop this student-centered program model.

Chapter 4

CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

This chapter contains findings, concerns, observations, and experiences related to the various aspects of designing a model for the management of a student-centered program. The innovative model was based on the evolution of an experimental program at Polk Community College and an extensive search of the literature.

CONCLUSIONS

Most community colleges are in a continuous state of change in an attempt to improve the instructional program, services to students, and efficiency of operation. There is a perpetual need for decisions which guide adjustments to change, . . . and the adequacy of these decisions determine the future of the institution.[1] The constant change and need for decisions dictates that a community college administrator must be an effective leader and change agent. Leadership abilities are necessary if an administrator is to be successful in helping his staff define educational goals and create a climate for innovative programs.

Tremendous pressures are being placed on community college administrators because of rapid growth and changing times. Not only must the administrator be an effective leader and change agent, he must also be an efficient manager. According to Lahti, educational administrators traditionally have not been identified as managers . . . . However, a contempory community college of today will require active, alert, and foresighted management.[2] This statement applies to curriculum management as well as other phases of management.

---

[1] Rensis Likert, The Human Organization: Its Management and Value (New York: McGraw-Hill Book Co., 1967), p. 128.

The student-centered program model was developed primarily to assist community college administrators with the management of an innovative program and at the same time emphasize his leadership role and change agent status. The study was fundamentally concerned with the development of a program for unmotivated, undecided, and unprepared students entering open-door community colleges. Specifically, the development utilized three techniques (the Human Potential Seminar, cognitive style mapping, and career planning) in an attempt to provide an effective and meaningful program for the students and at the same time relieve the administrative dilemma of how to cope with these students.

If colleges are to be efficient, students must succeed. Most students will succeed and present very few problems, but the open-door college invites those who are likely to face problems. One of the purposes of the community college curriculum is to give these students activities in which they can succeed.[3]

After examining numerous factors that affect learning, the phenomenon of individual differences appears to be an important key to academic success. Recognizing individual differences requires an individualized curriculum which is difficult to develop, implement, and manage. It requires highly defined and specific strategies to take care of all the contingencies of the learning process.[4]

---

[2] Robert E. Lahti, "Improving Performance Appraisals," Community and Junior College Journal, 45:8, March, 1975.

[3] Alec Clegg, "What Is a Humanizing Curriculum?," National Elementary Principals, 49:12, February, 1970.

The student-centered program model employs the individualized approach and the evidence available from the experimental program at Polk Community College indicates that it promotes success. The individualized approach, utilizing cognitive style mapping, coupled with the Human Potential Seminars and career counseling, contribute to the total growth of the student. Several benefits have been observed from the field testing:

1. Students increase in awareness of self-concept.
2. Instructors are providing individualized personal programs to help enhance success.
3. Students are involved in career and life style planning.
4. Students are effectively working in groups and one-to-one settings.

Probably the most significant single effect that the experimental program has had on Polk Community College has been the harmonious total involvement of administrators, teachers, counselors, and students as an integral part of the program.

The obvious conclusion is that the student-centered program, which has evolved from a long-term systematic endeaver, is based on sound psychological and educational concepts.

---

[4] William A. LaPlante, "Real Reform Still Needed on Individualization," Nations Schools, 87:64, February, 1971.

RECOMMENDATIONS

Each institution attempting to adopt the student-centered program model will face a different set of problems when adapting the model to local situations. However, the following recommendations are offered to enhance the possibility of achieving a successful installation:

Program Justification

Encourage support for the student-centered program by outlining why it is needed and explaining what the program will provide. Point out that:

1. The program provides the opportunity for a student to explore his academic, social, and vocational interests.

2. Increasing evidence found throughout the literature indicates that low academic achievement may be due to negative self-concepts.

3. Many students in college fail to realize that their educational program should prepare them for an occupation.

4. Students generally do not concern themselves with long-range planning.

5. Multiple instructional strategies will allow students to learn through interaction with their environment by utilizing all sensory modalities.

Committee Organization

The advisory committee provides the most effective means of developing and installing a student-centered program. The team approach creates an atmosphere in which all interest groups constantly interact to improve the quality of the program for which they are responsible.

It is essential to involve those who have a vital interest in the program, such as teachers, students, counselors, and administrators. All interest groups should be actively involved in the planning process. Students serving on the committee will not only provide important feedback for the overall improvement of instruction but it will give them an opportunity to share personal feelings and release frustrations or concerns in a supportive climate.

The committee should be involved in management functions such as:

1. Formulating policies.
2. Setting short and long-range goals.
3. Developing a program structure.
4. Defining roles and assigning responsibilities.
5. Monitoring and evaluating activities.

Staff Specifications

Assure that the staff members are volunteers. Teachers and counselors "volunteered" will adversely affect the installation because they are not truly committed. The staff involved in an innovative program of this type should have practical experience with genuine teaching and counseling skills, empathy for youth, and an understanding of the roles and goals of the program.

Be sure that those who volunteer understand that training sessions will be required in the Human Potential Seminars and Educational Sciences. Also emphasize to staff members that they will be involved in planning and program experiences such as:

1. Identifying and defining major concerns facing students.
2. Developing different ways these concerns can be remedied.

3. Providing ideas and subject matter knowledge to deal with concerns.

4. Collecting material resources necessary for the program.

5. Evaluating individual student progress.

Staff Edification

Workshops and inservice training for staff members in the new methods employed in the student-centered program will be essential. Rationale, knowledge, and skills must be developed for the chosen techniques to be administered properly. Chances of a successful installation are increased in direct proportion to the amount of training received by the staff in the Human Potential Seminar process and Educational Sciences.

Cognitive style mapping must be completely understood. Through this technique students can realize academic success. Bruner argues that it is possible to teach any subject to any individual at any age in some form, . . . the challenge is to discover ways to represent the idea in a mode that is within the individuals reach.[5] Through cognitive style mapping, diagnosis, prescriptions, and bursting this can be accomplished.

The staff must be trained to become competent in all pertinent factors and components of an instructional system such as:

1. Preparing objectives, subject matter content, media, and materials for the instructional process.

2. Diagnosing learning problems.

---

[5] Jerome S. Bruner, "Liberal Education For All Youth," Education Digest, 31:6, February, 1966.

3. Prescribing the best learning sequences.
4. Conducting small and large group discussions.
5. Training students to engage independently in learning experiences.
6. Assisting students via individual conferences.
7. Augmenting students cognitive style.

There must be a balance between the cognitive and the affective domain. The Human Potential Seminar sessions will provide this balance. However, the staff must receive adequate training for the process to be successful. When properly structured and managed the Human Potential Seminar activities have a significant positive effect on participants perception of themselves and others. Emphasizing the affective domain not only enhances the self-concept, but the development of the right kinds of attitudes contribute to the mastery of academic skills.

Student Consideration

Many possible problem areas can be curtailed by being completely honest with the students. Give them accurate, logical and complete information about the program. This approach will aid in a successful installation by building confidence and an understanding of the program.

Convey to the students that the program is concerned with building men and women who will be able to identify and analyze situations which will affect their identity and future, and to make appropriate decisions that will ensure positive outcomes. Staff members must recognize and accept the fact that each student is and has the right to be an individual.

Communicate to the student that frequent counseling sessions will be required for the purpose of helping each individual develop his personal and vocational goals, and of assisting them in life style planning and making wise career choices.

Management Inspiration

A successful installation will depend greatly on the leadership of the administrator responsible for the student-centered program. The following checklist is provided for the administrator to use as a guide:

1. Implement cautiously on a pilot basis.
2. Administer in a humanistic manner.
3. Adequately identify and train staff prior to implementation.
4. Arrange for and supervise workshops and inservice training.
5. Provide consultants and supportive assistance for staff.
6. Develop specific curriculum to meet the needs of participating students.
7. Provide for continuous sequence of learning experiences.
8. Study all available college resources for possible use.
9. Budget money for substitutes, materials and resources.
10. Develop an augmentation sheet for each student.
11. Keep department heads, division chairmen, and other staff members constantly informed.
12. Formulate long-range goals in relation to the future of the program.

Evaluation Articulation

To assure a successful program installation use a systems analysis to continuously evaluate the program and ensure articulation with the total college program. Periodic feedback, through formative evaluation, permits necessary adjustments in the ongoing program and integrates program planning with implementation.

If the program appears to be faltering, look for the following which could result in a lack of program effectiveness:

1. Inappropriate, unachievable or otherwise poorly selected objectives.
2. Unskillfully designed program materials.
3. Unsuitable instructional techniques.
4. Ineffectual counseling procedures.
5. Unproductive Human Potential Seminar sessions.
6. Inadequate cognitive style map interpretation and prescription writing.
7. Incongruous staff members.
8. Inefficient cognitive style augmentation.
9. Improper evaluative instruments.

The following points are items for the evaluator to consider in order to design and execute a meaningful evaluation process:

1. In addition to evaluating the program objectives, determine questions staff members, students, and administrators want answered.
2. Make plans for continuous evaluation.
3. Seek materials designed to assess objectives and answer questions.
4. Schedule collection of data.
5. Keep reliable records of successes and failures.
6. Organize data collection to facilitate teachers.
7. Feed results of the formative evaluation back to the advisory committee continuously.

8. Interprete results of the summative evaluation.
9. Prepare final report for the advisory committee.

IMPLICATIONS

In addition to the conclusions and recommendations generated by this study, there are a number of implications resulting from the enterprise that should be discussed:

1. The administrator who effectively installs this model will not only influence student success, but will serve as a change agent by encouraging staff members to look for alternative instructional approaches.

2. This model will represent a significant contribution to other community colleges and administrators facing problems at open-door institutions.

3. This study will provide the administrator with the knowledge and facility to initiate educational change by guiding his staff in a manner to release their potential, by developing a climate for innovation, and by providing the required undergirding concepts to bring about this change.

4. Most institutions experience difficulty when attempting to bring about programmatic change. This model will provide a systematic procedure which minimizes installation problems.

5. Reverse-transfer students (those who transfer from a university to a community college) often face problems in making a suitable adjustment to the senior institution. Studies show that reverse-transfer students who were academic failures at senior institutions, after a period of enrollment in a community college,

overcome the initial negative effects of the failure experience and rebound with renewed confidence.[6] However, most community colleges have a waiting period which denies reverse-transfer students, with academic problems, immediate admission. The student-centered program could replace this existing policy. Reverse-transfer students could be admitted immediately and enrolled in the student-centered program where their problems could be identified and given prompt attention.

6. Cognitive style mapping and its implications for instruction should be utilized at all levels of education and should be included in pre-service and in-service teacher education programs.

7. Human potential seminars assist students in personal growth. The relevance of this group process also has implications for teachers, counselors, secretaries, and administrators. The process can provide individual growth experiences for everyone and increased trust, understanding, and communications.

8. By emphasizing career and life-style planning the college becomes more career-oriented, more responsive to the needs of the students, more responsive to the needs of the community, and more cooperatively involved in local business and industry.

9. This study has implications for additional research, admission policies, recruiting methods, counseling and advising procedures, methods of remediation, future student-centered programs, and other administrative challenges facing community college administrators.

---

[6] Paul K. Preus and Jerol B. Swaim, "Open-Doors For Reverse Transfer Students," Community and Junior College Journal, 44:28, February, 1974.

10. Colleges installing this student-centered program will attract the attention of other colleges and organizations and will receive numerous inquiries. The administration could respond by:

a. Allowing student-centered program staff members to help other colleges innovate.
b. Scheduling on-campus tours.
c. Organizing an interesting slide-tape presentation.
d. Allowing visitors to talk freely with staff and students.
e. Inviting community to see the program in action.
f. Making presentations at conferences, workshops, civic club meetings, and PTA meetings.
g. Releasing information to news media.
h. Publishing a report on the curriculum installation.

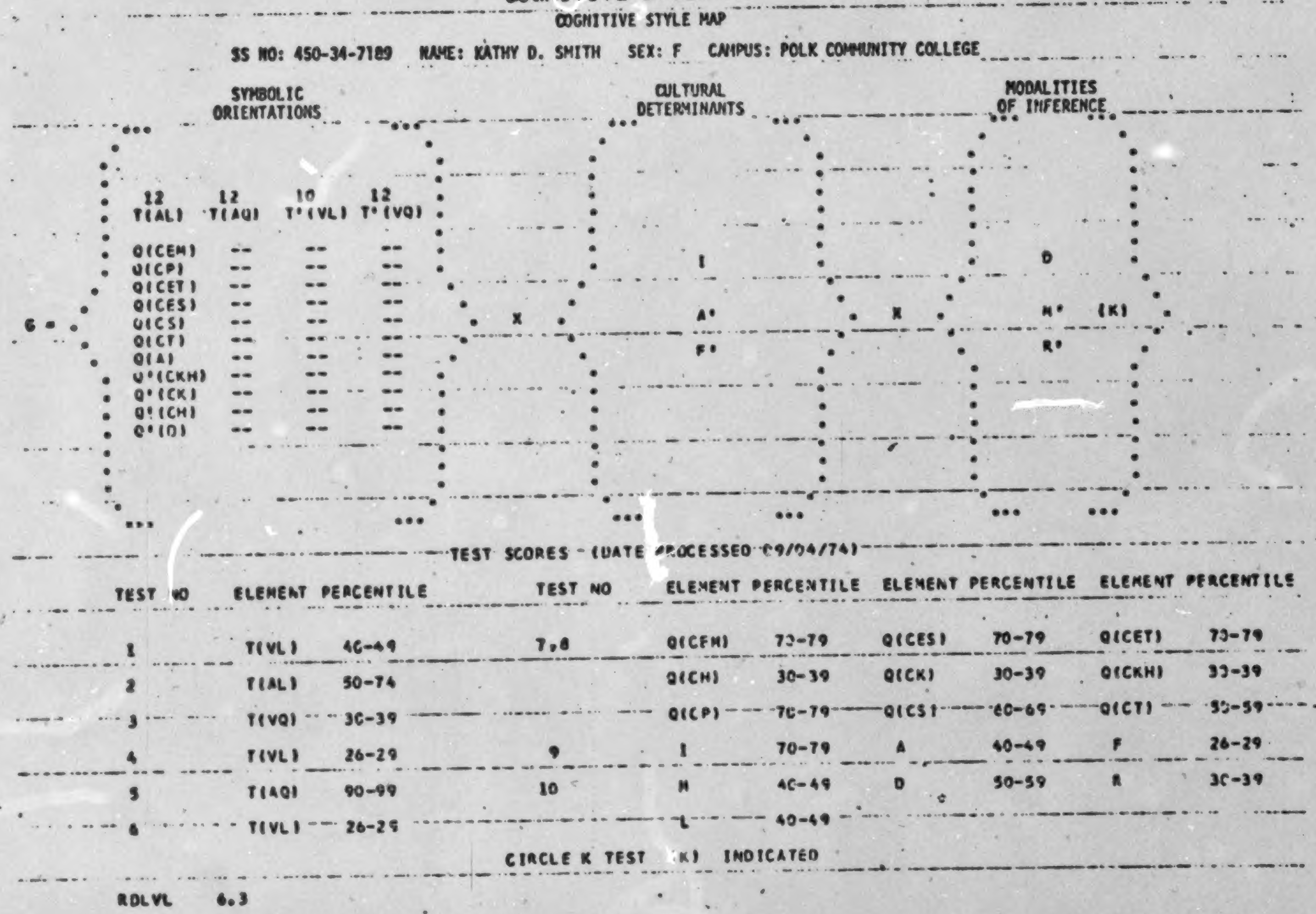
The overall purpose of this study has been the development of a model for the management of a student-centered program at a community college. Specifically, the model focused on the process that an administrator would follow to develop, staff, organize, emplement, supervise, and evaluate a program of this type. The model followed a systematic approach to innovation and merged Human Potential Seminars, cognitive mapping, and career planning in an attempt to maximize student mobility, self-concept, academic achievement, and career opportunities.

Community colleges are charged with teaching, counseling, advising, and directing the young people who enter their open-doors. Results must be meaningful and worthy. If an institution is to achieve significant levels of effectiveness, it is obvious that administrators must exercise appropriate leadership. This study incorporated in the student-centered program model strategies to accomplish these goals.

It appears that community colleges have much work to do in the area of student-centered programs. The open-door admissions policy will continue to attract large numbers of students who are unmotivated, undecided, and unprepared. If their needs are to be met, more community colleges will have to turn their attention to installing student-centered programs and it is expected that this study will be useful in such development.

APPENDIXES

APPENDIX A
COGNITIVE STYLE MAP



```
                                   COGNITIVE STYLE MAP

           SS NO: 450-34-7189   NAME: KATHY D. SMITH   SEX: F   CAMPUS: POLK COMMUNITY COLLEGE

                  SYMBOLIC                         CULTURAL                      MODALITIES
                ORIENTATIONS                     DETERMINANTS                   OF INFERENCE

           12      12      10      12
          T(AL)   T(AQ)  T'(VL)  T'(VQ)

          Q(CEM)   --      --      --                   I                        D
          Q(CP)    --      --      --
          Q(CET)   --      --      --
          Q(CES)   --      --      --
  G =     Q(CS)    --      --      --       X           A'          X            M'   (K)
          Q(CT)    --      --      --
          Q(A)     --      --      --                   F'                       R'
          Q'(CKH)  --      --      --
          Q'(CK)   --      --      --
          Q'(CH)   --      --      --
          Q'(D)    --      --      --

---------------------TEST SCORES - (DATE PROCESSED 09/04/74)----------------------------

   TEST NO   ELEMENT PERCENTILE      TEST NO   ELEMENT PERCENTILE  ELEMENT PERCENTILE  ELEMENT PERCENTILE

      1      T(VL)     40-49           7,8     Q(CEM)    70-79     Q(CES)    70-79     Q(CET)    70-79
      2      T(AL)     50-74                   Q(CH)     30-39     Q(CK)     30-39     Q(CKH)    30-39
      3      T(VQ)     30-39                   Q(CP)     70-79     Q(CS)     60-69     Q(CT)     50-59
      4      T(VL)     26-29            9      I         70-79     A         40-49     F         26-29
      5      T(AQ)     90-99           10      M         40-49     D         50-59     R         30-39
      6      T(VL)     26-29                   L         40-49

                                 CIRCLE K TEST (K) INDICATED

   RDLVL     6.3
```

APPENDIX B

COGNITIVE STYLE MAPPING GLOSSARY

1. Symbols and Their Meanings

A. Theoretical Symbols:

T(VL)	Theoretical Visual Linguistic--ability to find meaning from words you see. A major in this area indicates someone who reads with a better than average degree of comprehension.
T(AL)	Theoretical Auditory Linguistic--ability to acquire meaning through hearing spoken words.
T(VQ)	Theoretical Visual Quantitative--ability to acquire meaning in terms of numerical symbols, relationships, and measurements.
T(AQ)	Theoretical Auditory Quantitative--ability to find meaning in terms of numerical symbols, relationships, and measurements that are spoken.

B. Qualitative Symbols Associated With Sensory Stimuli:

Q(A)	Qualitative Auditory--ability to perceive meaning through the sense of hearing. A major in this area indicates ability to distinguish between sounds, tones of music, and other purely sonic sensations.
Q(O)	Qualitative Olfactory--ability to perceive meaning through the sense of smell.
Q(S)	Qualitative Savory--ability to perceive meaning by the sense of taste. Chefs should have highly developed qualitative olfactory and savory abilities.
Q(T)	Qualitative Tactile--ability to perceive meaning by the sense of touch, temperature, and pain.
Q(V)	Qualitative Visual--ability to perceive meaning through sight.

C. Qualitative Symbols That Are Programmatic in Nature:

Q(P)	Qualitative Proprioceptive--ability to synthesize a number of symbolic mediations into a performance demanding monitoring of a complex task (e.g., playing a musical instrument, typewriting); or into an immediate awareness of a possible set of interrelationships between symbolic mediations, i.e., dealing with "signs."

Q(PD)	Qualitative Proprioceptive Dextral--a predominance of right-eyed, right-handed and right-footed tendencies (a typically right-handed person) while synthesizing a number of symbolic mediations into a performance demanding monitoring of a complex task (e.g., playing a musical instrument, typewriting).
Q(PK)	Qualitative Proprioceptive Kinematics--ability to synthesize a number of symbolic mediations into a performance demanding the monitoring of a complex physical activity involving motion.
Q(PS)	Qualitative Proprioceptive Sinistral--a predominance of left-eyed, left-handed and left-footed tendencies (a typically left-handed person) while synthesizing a number of symbolic mediations into a performance demanding monitoring of a complex task (e.g., playing a musical instrument, typewriting).
Q(PTM)	Qualitative Proprioceptive Temporal--ability to synthesize a number of symbolic mediations into a performance demanding the monitoring of a complex physical activity involving timing.

D. Qualitative Symbols Associated With Cultural Codes:

Q(CEM)	Qualitative Code Empathetic--sensitivity to the feelings of others; ability to put yourself in another person's place and see things from his point of view.
Q(CES)	Qualitative Code Esthetic--ability to enjoy the beauty of an object or an idea. Beauty in surroundings or a well-turned phrase are appreciated by a person possessing a major strength in this area.
Q(CET)	Qualitative Code Ethic--commitment to a set of values, a group of principles, obligations and/or duties.
Q(CH)	Qualtitative Code Histronic--ability to exhibit a deliberate behavior, or play a role to produce some particular effect on other persons. This type of person knows how to fulfill role expectations.
Q(CK)	Qualitative Code Kinesics--ability to understand and to communicate by nonlinguistic functions such as facial expressions and motions of the body (e.g., smiles and gestures).

APPENDIX B (continued)

Q(CKH)	Qualitative Code Kinesthetic--ability to perform motor skills, or effect muscular coordination according to a recommended or acceptable form (e.g., bowling according to form, or golfing).
Q(CP)	Qualitative Code Proxemics--ability to judge the physical and social distance that the other person would permit between oneself and that other person.
Q(CS)	Qualitative Code Synnoetics--personal knowledge of oneself.
Q(CT)	Qualitative Code Transactional--ability to maintain a positive communicative interaction which significantly influences the goals of the persons involved in that interaction (e.g., salesmanship).
Q(CTM)	Qualitative Code Temporal--ability to respond or behave according to time expectations imposed on an activity by members in the role-set associated with that activity.

2. Cultural Determinants

I	Individuality--uses one's own interpretation as an influence on meanings of symbols.
A	Associates--symbolic meanings are influenced by one's peer group.
F	Family--influence of members of the family or a few close personal friends on the meanings of symbols.

3. Modalities of Inference

M	Magnitude--a form of "categorical reasoning" that utilizes norms or categorical classifications as the basis for accepting or rejecting an advanced hypothesis. Persons who need to define things in order to understand them reflect this modality.
D	Difference--this pattern suggests a tendency to reason in terms of one-to-one contrasts or comparisons of selected characteristics or measurements. Artists often possess this modality as do creative writers and musicians.

APPENDIX B (continued)

R	Relationship--this modality indicates the ability to synthesize a number of dimensions or incidents into a unified meaning, or through analysis of a situation to discover its component parts. Psychiatrists frequently employ the modality of relationship in the process of psychoanalyzing a client.
L	Appraisal--is the modality of inference employed by an individual who uses all three of the modalities noted above (M, D, and R), giving equal weight to each in his reasoning process. Individuals who employ this modality tend to analyze, question, or in effect, appraise that which is under consideration in the process of drawing a probability conclusion.
K	Deductive--indicates deductive reasoning or the form of logical proof used in geometry or that employed in syllogistic reasoning.

APPENDIX C

PROPOSAL FOR INTERDISCIPLINARY COURSE

TO: PCC Curriculum Committee

FROM: WAGS Advisory Committee

SUBJECT: Request for New Course

History and Rationale

Polk, like many other community colleges with an "open-door" policy, has tried a variety of approaches to remediation, to deal effectively with the disadvantaged, the undecided, the unmotivated, and the unprepared students. Through the evolution of our attempts at educational improvement, from compulsory guided studies based on test scores, to multi-level guided studies, to a revised grading system, to independent study labs, peer tutoring, systems courses, etc., a pilot project emerged.

This involved the notion of "going to the theorized heart of the problem" and dealing with "the problem" rather than the various "symptoms." Most students experiencing difficulty in college have in common a poor self-image, or at least an inaccurate self-concept. They are typically confused about their values. They do not know why they are in college, or where they want to go, or how to get there.

Another much studied notion is that students learn at different rates, but also in different ways. They have different learning styles (thus, systems courses are answers for some kinds of students, but stumbling blocks for others).

The pilot project took these two notions (self-image and learning style) and a couple of courses (AMS 105 and RDG 150) and attempted to accomplish the objectives of these notions: (1) to develop students who come to know and understand themselves and their values, (2) students who can set goals for themselves and follow through to accomplishment, (3) students who understand how they learn most efficiently, (4) students who can utilize their learning style to achieve college success, and (5) students who can consciously and systematically alter their learning style.

While AMS and RDG awkwardly served as homes for the project successfully it appears to be much more appropriate to have a tailor-made course to fit the project.

APPENDIX C (continued)

Proposal

Establish an interdisciplinary course that will be co-taught (team taught) by faculty and counselors. This course would include the Human Potential Seminar experiences to accomplish self-image, values and goals type objective. It would involve self-knowledge-type standardized testing and career exploration. It would utilize the Educational Sciences cognitive style mapping, interpretation, and usage, to accomplish learning objectives. This proposed course will become the core course in the WAGS Program.

Present plans call for the selection of sixty students to take the new proposed course. In addition there would be faculty from general education areas trained in the Human Potential Seminar process and the Personalized Educational Programs technique. Certain sections of their courses will employ these techniques and only WAGS students allowed to sign up for these sections. In this way these students would be scheduled for all of their courses in these special sections, allowing for a total educational experience with the same approach.

New Course Description

IDS 101 LEARNING STYLES IN EDUCATION 3 Hours 3 Credits

A study of the development and alteration of individual learning styles. The relationship of self-concept with learning styles will be emphasized. Opportunity will be given for students to diagnose their own learning styles in relation to self-assessment, motivation, personal values, goals, and long and short range decision making.

Units of Instruction

Cognitive style mapping

Human Potential Seminar

Cognitive style map interpretation

Individual learning style related to learning project

Learning style alteration

Self assessment instruments for more methods of developing self knowledge

Knowledge Intergration

Long range goals and life planning models.

APPENDIX D

SUPPORTING COURSES IN THE PCC WAGS PROGRAM

TERM I

1. AMS 105 INTRODUCTION TO AMERICAN SOCIAL STUDIES 3 Hrs. 3 Crs.

Concentrates on the development of basic student skills and includes units on the United States Constitution, United States Court System, concepts of sociology and man's environment. Each student functions on an individualized schedule. Designed so that student moves to next unit when minimum requirements are met in current unit.

2. ENH 101 FRESHMAN ENGLISH I 3 Hrs. 3 Crs.

Fundamentals of effective expression, with emphasis upon expository writing, logical and imaginative thinking, and reading for understanding.

3. RDG 101 COMMUNICATION TECHNIQUES 3 Hrs. 3 Crs.

This course is designed to develop concepts, understanding, and skills conducive to success in college. Study includes effective organization of time, a study technique, listening and note-taking skills, acceptable forms for term papers and report writing, methods of presentation of oral reports, library organization, reading skills in subject matter areas, and basic reading skills.

4. IDS 101 LEARNING STYLES IN EDUCATION 3 Hrs. 3 Crs.

A study of the development and alteration of individual learning styles. The relation of self-concept with learning style will be emphasized. Opportunity will be given for students to diagnose

APPENDIX D (continued)

their own learning styles in relation for self-assessment, motivation, personal values, goals, and long and short range decision making.

5. ELECTIVE

TERM II

1. AMS 215 CONTEMPORARY AMERICAN STUDIES 3 Hrs. 3 Crs.

   A historical and contemporary analysis of American society. Emphasis will be placed upon political, social, and economic elements of American civilization. Included in the course will be an application of the principle of the United States Constitution to the current American scene.

2. ENH 102 FRESHMAN ENGLISH II 3 Hrs. 3 Crs.

   A continuation of ENH 101, emphasizing the experience and analysis of basic literary forms.

3. RDG 151 ACCELERATED READING I 3 Hrs. 3 Crs.

   Specific programs of study and laboratory requirements will be determined by the instructor after diagnostic testing to determine abilities in reading. Lecture and laboratory sessions are organized to allow study and practice in techniques permitting improved comprehension, rate flexibility, and vocabulary development. Lecture units may be exempted by meeting performance criteria established for unit pre-tests.

4. ELECTIVE

5. ELECTIVE

APPENDIX E

SOURCES OF CONSULTANTS AND WORKSHOPS

American Educational Sciences Association
Oakland Community College
2480 Opdyke Road
Bloomfield Hills, Michigan 48013

College Associates
Developmental Studies
4101 Medical Parkway
Austin, Texas 78756

Polk Community College
999 Avenue H., N.E.
Winter Haven, Florida 33880

Human Development Services, Inc.
Life Career Development System
P. O. Box 1403
Ann Arbor, Michigan 48106

Human Potential Project
2527 Hastings Avenue
Evanston, Illinois 60201

Mountain View Community College
4849 West Illinois Avenue
Dallas, Texas 75211

APPENDIX F

EDUCATIONAL SCIENCES WORKSHOP

March 3-8, 1974
Court of Flags
Orlando, Florida

Conference Director:
Dr. Marion Neil, Design and Management
Post-Secondary Education
Florida State University

Conducted by:
Dr. Joseph E. Hill, President, Oakland Community College
Dr. Derek N. Nunney, Vice President, Oakland Community College
Mrs. Barbara A. Bowman, Director, Teacher Improvement Project,
East Lansing Public Schools, Michigan

Sunday, March 3, 1974

4:00-6:00 p.m.	Registration and Cognitive Style Inventory
7:15-7:30	Welcome and Orientation Dr. Marion Neil
7:30-8:30	"Basis for Educational Sciences-A Conceptual Framework" Dr. Joseph E. Hill
8:30-10:00	President's Reception and Cognitive Style Inventory

Monday, March 4, 1974

9:00-9:10 a.m.	Conference Objectives Dr. Derek N. Nunney
9:10-10:30	The Educational Sciences Dr. Hill
10:30-10-45	BREAK
10:45-12:00	"Personalizing Educational Programs" Dr. Nunney
12:00-1:15 p.m.	LUNCH

APPENDIX F (continued)

1:15-1:45	Cognitive Style First Set Dr. Hill
1:45-3:00	Groups A--Dr. Joseph E. Hill Mrs. Barbara A. Bowman B--Dr. Derek N. Nunney Dr. Marion Neil
3:00-3:15	BREAK
3:15-3:45	Cognitive Style Second and Third Sets Dr. Hill
3:45-5:00	Groups A--Dr. Derek N. Nunney Dr. Marion Neil B--Dr. Joseph E. Hill Mrs. Barbara A. Bowman
5:00-5:30	Review Questions and Answers Dr. Hill Dr. Nunney Dr. Neil Mrs. Bowman
6:00-7:00 p.m.	Hospitality Hour
7:00	DINNER-on your own
8:15-10:00	Informal Group Discussion and Hospitality

Tuesday, March 5, 1974

9:00-10:30 a.m.	Memory Set Dr. Hill Determining Modes of Understanding Dr. Nunney
10:30-10:45	BREAK

APPENDIX F (continued)

10:45-11:45	Map Interpretations- Collective Cognitive Style Dr. Hill
	Group and Individual Interpretations Dr. Hill Dr. Nunney Dr. Neil Mrs. Bowman
11:45-12:45	LUNCH
12:45-2:00 p.m.	Matching Cognitive Style to Mode of Understanding Dr. Hill
2:00-3:00	Systemic Analysis Decision-Making Dr. Hill
3:00-3:15	BREAK
3:15-5:00	Socio-Drama Dr. Nunney Dr. Neil Mrs. Bowman
6:00-7:00	Hospitality Hour
7:00	DINNER-on your own
8:15-10:00	Informal Group Discussion and Hospitality

Wednesday, March 6, 1974

9:00-9:45 a.m.	John Doe Maps 1,4,5 and Prescriptions Dr. Nunney
9:45-10:30	Empirical Mapping of 2 Students Dr. Nunney
10:30-10:45	BREAK
10:45-12:00	Mapping Modes of Understanding Dr. Nunney
	Group Activity Dr. Nunney Dr. Neil Mrs. Bowman

APPENDIX F (continued)

12:00-1:15	LUNCH
1:15 on	FREE AFTERNOON Visitations, Sightseeing

Thursday, March 7, 1974

9:00-10:30 a.m.	Teaching Style Mrs. Bowman
	Counseling Style Dr. Nunney
	Training Teachers Dr. Nunney Dr. Neil Mrs. Bowman
10:30-10:45	BREAK
10:45-12:00	Administrative Style Dr. Nunney
12:00-1:15	LUNCH
1:15-3:00 p.m.	Implementation Dr. Neil Mrs. Bowman
3:00-3:15	BREAK
3:15-4:30	Group Writing Mission Statement Design Criteria Performance Goals Dr. Nunney, Dr. Neil, Mrs. Bowman
4:30-5:30	Review Dr. Nunney
6:00-7:00	Hospitality Hour
7:00	DINNER-on your own
8:15-10:00	Group discussions and Hospitality

APPENDIX F (continued)

Friday, March 8, 1974

9:00-10:30 a.m.	Presentation by groups of Program Plans Dr. Nunney
10:30-10:45	BREAK
10:45-12:00	Evaluation
12:00	Wrap-up LUNCHEON

APPENDIX G

COGNITIVE STYLE MAPPING WORKSHOP

Polk Community College
Winter Haven, Florida
October 27-29, 1974

Sunday, October 27

2:00-2:15 p.m.	Welcome by President Lenfestey
2:15-3:15 p.m.	Introduction to the Educational Sciences Dr. Derek Nunney
3:15-3:35 p.m.	Coke - Coffee Break
3:35-5:15 p.m.	Introduction to Symbols Dr. Derek Nunney
5:15-6:00 p.m.	Group Sessions on Individual Maps Dr. Neil, Helen Kerr, Ginger Allsopp, Nena Frost, Dr. Cooney, U. J. Johnson, Dr. Taylor, Pat Miller
6:00 p.m. until . . .	Optional hospitality and dinner with discussion.

Monday, October 28

8:45-9:00 a.m.	Outline of day's objectives Dr. Marion Neil
9:00-10:30 a.m.	Group writing of statements about symbols
10:30-11:00 a.m.	O. J. Break
11:00-12:15 p.m.	John Doe map interpretation Dr. Derek Nunney
12:15-1:30 p.m.	Lunch -- Sheraton Dining Room
1:30-2:30 p.m.	Oakland Community College film and discussion -- Dr. Derek Nunney
3:30-4:00 p.m.	Break
4:00-5:30 p.m.	Implementation and Prescription Bursting Dr. Derek Nunney

APPENDIX G (continued)

5:30-7:30 p.m.	Social hour and dinner Sheraton Dining Room
7:30-9:00 p.m.	WAGS Presentation -- Nena Frost and Ginger Allsopp

Monday Night, October 28

COGNITIVE STYLE MAPPING MINI-WORKSHOP

(A presentation for those not in the program)

4:00-4:15 p.m.	Introduction to Educational Sciences
4:15-4:20 p.m.	Assessment: How we get the maps
4:20-4:30 p.m.	Map sets
4:30-5:00 p.m.	Map symbols explanation
5:00-5:30 p.m.	Individual map interpretation
5:30-5:45 p.m.	Student map interpretation
5:45-6:00 p.m.	Questions/Discussion
6:00-7:30 p.m.	Hospitality and dinner at the Sheraton
7:30-9:00 p.m.	WAGS presentation

Tuesday, October 29

9:00-10:00 a.m.	Share symbol statements
10:00-10:30 a.m.	Group Map -- Dr. Marion Neil
10:30-11:00 a.m.	Break
11:00-12:30 p.m.	"John Q." Prescription Writing for Discipline Groups
12:30-2:00 p.m.	Lunch -- Sheraton Dining Room
2:00-3:15 p.m.	Empirical Mapping of two students Nena Frost
3:15-4:00 p.m.	Socio-Drama Planning by groups
4:00-4:15 p.m.	Break
4:15-6:00 p.m.	Socio-Drama Presentation and Social Hour

APPENDIX H

INSERVICE TRAINING SESSIONS

POLK COMMUNITY COLLEGE WAGS PROGRAM
INSERVICE TRAINING SESSIONS

PLACE: HC 110
TIME: 8:30 A.M. - 11:00 A.M.

TUESDAY 14 May 1974 ---- COUNSELING CRITERIA

THURSDAY 16 May 1974 ---- INTRO TO PACE FILM; SELF ESTEEM (ALLSOPP)

THURSDAY 23 May 1974 ---- INTRO TO SYMBOLS (FROST)

TUESDAY 28 May 1974 ---- INTRO TO COURSE (KERR)

THURSDAY 30 May 1974 ---- REVIEW FOLDERS; INTRO TO SYMBOLS PART I (FROST)

TUESDAY 4 June 1974 ---- REVIEW FOLDERS; SYMBOLS PART II

THURSDAY 6 June 1974 ---- MAP INTERPRETATIONS AND PRESCRIPTION WRITING (JOHNSON)

TUESDAY 11 June 1974 ---- BRAINSTORM ON COURSE CONTENT MODULES (ALLSOPP, KERR, OLDHAM)

POLK COMMUNITY COLLEGE
Winter Haven, Florida 33880

APPENDIX I

STUDENT INVITATION TO JOIN PCC WAGS PROGRAM

May 30, 1974

Ms. Kathy D. Smith
1400 Carver Avenue
Lakeland, FL 33801

Dear Ms. Smith:

Welcome to PCC! You are one of sixty new students being invited to be a part of WAGS, a new educational program which will include many "extras" for you. Your initial counseling session will be Tuesday morning June 11 from 9 until 12:00 in LR-1B on the PCC campus. At this time you will hear all about WAGS, all about PCC, and all about your new counselor and class schedule for Term I.

It is imperative that you attend this session. If it becomes impossible for you to keep this appointment, please notify Ms. Barbara Cassady at 294-7421 Ext. 234 and we will try to reschedule your appointment.

Looking forward to meeting you on June 11.

Sincerely,

Thomas E. Dodamead

Tom E. Dodamead
Director of Counseling

TED:cm

APPENDIX J

STUDENT DATA SHEET

POLK COMMUNITY COLLEGE--WAGS PROGRAM

☐ WAGS
☐ Control

NAME ____________ (last) ____________ (first) ____________ (middle)

SOC. SEC. ____________ BIRTHDAY ____________ SEX ________

DATE GRADUATED ____________ H.S. ____________________

PROGRAM CHOICE AT BEGINNING ____________________

PROGRAM CHOICE AT END ____________________

FTGT SCORES: ___ A ___ E ___ SS ___ S ___ M ___ T ___ R ______ TOTAL

OTHER H.S. TEST SCORES: ____________________

H.S.G.P.A. ________ H.S. RANK ________ IN CLASS OF ________

HRS. ATTEMPTED AT PCC ________ HRS. COMPLETED AT PCC ________

PCC GRADES

TERM I ____ ____ ____ ____ ____ ____ ______ G.P.A.

TERM II ____ ____ ____ ____ ____ ____ ______ G.P.A. ______ YEAR G.P.A.

COGNITIVE MAP

{ ____ ____ ____ ____ } X { } X { }

RDLVL ____________ CIRCLE K TEST (K) NOT INDICATED ___

APPENDIX K

COURSE SCHEDULE

POLK COMMUNITY COLLEGE
WAGS PROGRAM

TERM I

ENH 101	Freshman English I	8 MWF	Allsopp
AMS 105	Intro to American Social Studies	9 MWF	Oldham
RDG 101	Communication Techniques	10 MWF	Kerr
ENH 101	Freshman English I	11 MWF	Allsopp
AMS 105	Intro to American Social Studies	12 MWF	Oldham
RDG 101	Communication Techniques	8-10 T, 8-9 TH	Kerr
IDS 101	Learning Styles in Education	10-11 T, 9-11 TH	Frost
IDS 101	Learning Styles in Education	11-1 T, 11-12 TH	Cooney
	Elective		

TERM II

ENH 102	Freshman English II	8 MWF	Allsopp
AMS 215	Contemporary American Studies	9 MWF	Thompson
RDG 151	Accelerated Reading I	10 MWF	Kerr
ENH 102	Freshman English II	11 MWF	Allsopp
AMS 215	Contemporary American Studies	12 MWF	Thompson
RDG 151	Accelerated Reading I	8-10 T, 8-9 TH	Kerr
	Elective		
	Elective		

APPENDIX L

HUMAN POTENTIAL SEMINAR SCHEDULE

POLK COMMUNITY COLLEGE WAGS PROGRAM
HUMAN POTENTIAL SEMINAR SCHEDULE
FOR LEADERS OF GROUP I
TIME: 9:00-11:00
PLACE: HC 110

Page numbers in Lesson Plans refer to pages in the Leader's Manual which will help you in preparing for the exercises.

Page numbers listed on the assignments refer to the Student's H. P. Booklet and will help him to prepare for subsequent exercises.

SESSION & DATE	ACTIVITY
Session #1 Thursday, September 5	Administer Tennessee Self-Concept Test Explain Action Goal Setting (Manual pp. 9-12) Begin Personal Unfoldment (pp. 4-6) Set Goals Assignment: Read pp. 1-8
Session #2 Thursday, September 12	Goal Review--Begin filling in Action Goal Log Continuation of Personal Unfoldment Empathetic Recall (pp. 7-8) Set Goals Assignment: Read pp. 9-14
Session #3 Thursday, September 19	Goal Review Peak Experiences and Mini-Peaks (pp. 15-22) Achievements and Successes Part 1: list achievements and everyone share verbally (pp. 23-27) Set Goals Assignment: Read pp. 15-17
Session #4 Thursday, September 26	Goal Review Achievements and Satisfactions Part 2: Tabulate for Primary and Secondary Motivators (see pp. 22-37 Leader's Manual). Share motivators and most rewarding experiences. Set Goals Assignment: Read pp. 18-20. Fill in answers to questions.

APPENDIX L (continued)

Session #5 Thursday, October 3	Buscaglia Film Class discussions
Session #6 Thursday, October 10	Goal Review Students answer values questions on newsprint (pp. 38-42) Share answers; guess as to Five Top Values Explain Values Auction (pp. 45-49) Set Goals Assignment: Budget $2500 for Values Auction (p. 22)
Session #7 Thursday, October 17	Goal Review Values Auction (p. 48) Share what you bought; how you would bargain differently, etc. Set Goals Assignment: Read pp. 23-27; Write in strengths for group members
Session #8 Thursday, October 24	Goal Review SOS - SIS (pp. 50-57) Use Method 2 Use newsprint; have students individually relate strengths they see in each other and in themselves. Set Goals Assignment: Read pp. 28-30
Session #9 Thursday, October 31	Goal Review Re-administer Tennessee Self-Concept Test Discussion Long Term Life Goal Setting (pp. 58-61) Set Final Goals Assignment: Bring something to share: Food (smack, smack), poetry, pictures, something you made, etc. Use your imagination!!
Session #10 Thursday, November 7	Goal Review H.P. Wrap-Up --- Bring something to share Assignment: REMEMBER WHAT IS GOOD ABOUT YOU!

APPENDIX M

IDS 101 COURSE SCHEDULE

POLK COMMUNITY COLLEGE WAGS PROGRAM
IDS 101 COURSE SCHEDULE FOR GROUP I

WEEK	Tuesday 10:00-11:00	Thursday 9:00-11:00
1	INTRO TO COURSE	READING AND INDEPENDENT STUDY LAB SELF-ESTEEM PACE FILM
2	INTRO TO SYMBOLS PART 1	HUMAN POTENTIAL SESSION #1
3	INTRO TO SYMBOLS PART 2	HUMAN POTENTIAL SESSION #2
4	USING SYMBOLS PART 1	HUMAN POTENTIAL SESSION #3
5	USING SYMBOLS PART 2	HUMAN POTENTIAL SESSION #4
6	GENERAL INTRO TO MAP INTERPRETATION	BUSCAGLIA FILM
7	INDIVIDUAL MAP INTERPRETATIONS	HUMAN POTENTIAL SESSION #5
8	INDIVIDUAL MAP INTERPRETATIONS	HUMAN POTENTIAL SESSION #6
9	STRONG ADMINISTRATION	HUMAN POTENTIAL SESSION #7
10	HOW TO WORK IN A GROUP	HUMAN POTENTIAL SESSION #8
11	EXPLANATION OF AUGMENTING STYLES	HUMAN POTENTIAL SESSION #9
12	SCHEDULING TERM II AND PRACTICE PRESCRIPTION WRITING	PRACTICE PRESCRIPTION WRITING
13	STRONG INTERPRETATION	CAREER GOAL EXPLORATION
14	PROJECTS	PROJECTS
15	WRAP UP LOOSE ENDS	SHOW PROJECTS

APPENDIX N

IDS 101 SYLLABUS

POLK COMMUNITY COLLEGE WAGS PROGRAM

IDS 101 LEARNING STYLES IN EDUCATION

I. COURSE OBJECTIVES

a. Through Human Potential Seminars students will accomplish a more positive self-image and become effective in setting and accomplishing both long- and short-term goals.

b. Students will become aware of their learning styles through the process of Cognitive Style Mapping and use this knowledge to process information more efficiently.

c. Students will become aware of life goals and careers suited to their interests and capabilities and will explore the possibilities of achieving such goals.

II. EVALUATION

Grading procedures for IDS 101 will be based on the completion of a set of performance goals by each individual student. Each goal will have an established point weight and several goals will be required while others will be optional. The following is a breakdown of points required to achieve a particular grade:

A = 131 acquired points or higher
B = 86-130 acquired points
C = 75-85 acquired points
D = 65-74 acquired points
W = below 65 acquired points or
failure to meet required points

Students may propose original performance goals or projects based on their own creativity. If accepted by the instructor, a maximum of 15 points may be earned for each completed goal.

Class attendance is REQUIRED. Points will be added or subtracted according to the following schedule:

Class Hours Absent	Points
2 or less	+5
3	+4
4	+2
5	0
6	-2
7	-4
8 or more	-5 (possible W in course)

Students will also be subjectively evaluated on class cooperation and participation within a range of -5 to +5 points.

APPENDIX N (continued)

III. SCHEDULE

WEEK	PERFORMANCE GOAL	POINTS
Week 1 Pace Film: Self Esteem	1. Write a 2-3 paragraph summary of your personal reaction to the Pace Film on Self Esteem.	5 points
Week 3 Introduction to Symbols	2. REQUIRED Complete the reaction form to "The Cognitive You" slide presentation.	5 points
Week 4 Using Symbols	3. REQUIRED Empirical Mapping: Select from the 26 symbols those elements which you feel represent "The Cognitive You." Show the major as well as the minor elements. Give 2-3 examples of specific behaviors you find in yourself which illustrate each element in your Empirical Map. Example: I am a TAL (major): Behaviors: (1) I prefer to listen to news on radio rather than read a newspaper. (2) I like a teacher who verbally explains directions. (3) I try to understand the lyrics in a song.	15 points MAXIMUM
Week 5 Using Symbols	4. REQUIRED Complete the Programmed Text on Educational Sciences Symbols and take test.	10 points MAXIMUM
Week 5 Using Symbols	5. Participate in a Socio-Drama in class in which you role play elements in the Cognitive Style.	5 points
Week 6 Buscaglia Film	6. Leo Buscaglia says "if you are a peach, be the best peach." React to this statement by explaining a conflict situation in your life in which you were confronted by a "banana" (i.e. someone with views different from your own). You may write this or use a cassette tape to explain your experience.	5 points

APPENDIX N (continued)

WEEK	PERFORMANCE GOAL	POINTS
Week 8 H. P. Values Auction	7. Re-evaluate the Values Auction and state how you would bid differently if given the opportunity to participate again. Include your top values by priority and explain why and/or how you value these items.	5 points
Week 11 H. P. Goal Reviews	8. REQUIRED Keep an up-to-date ACTION GOAL LOG during the Human Potential Seminar. Fill in all motivators, values, outcomes, etc. and turn in to your professor.	15 points MAXIMUM
Week 12 Prescription Writing	9. REQUIRED Write up a PRESCRIPTION OUTLINE based on your Cognitive Style Map. Include the areas which need augmentation and what types of activities you would like to do to improve your skill in each area. Example: I have a minor or negligible TVL in my map. Activities: (1) I will spend 6 hours in the I.S. Lab working on reading skills. (2) I will read 2 novels.	15 points MAXIMUM
Week 12 Prescription Writing	10. Submit a list of AUGMENTATION ACTIVITIES from your Prescription Outline which you will complete before the end of the term.	5 points for each activity completed
Week 13 Career Goal Exploration	11. Compile a list of careers or occupations which interest you; include educational requirements, opportunities, salary ranges, and map elements for each career.	15 points MAXIMUM
Week 13 Career Goal Exploration	12. Report on two interviews you have had with persons engaged in any one of your occupational interest areas. Have a written format to follow for the interviews.	15 points MAXIMUM

APPENDIX N (continued)

Week 14 Projects	13.	REQUIRED Class Project: Put together a 5-10 minute presentation on "The Cognitive You," you may use pictures, snapshots, slides, collage, art work, poetry---ANYTHING which will help illustrate the TOTAL YOU as you have come to know you in this course. Present at end of course.	15 points MAXIMUM
Week 13 Film VALUES AND GOALS	14.	Write a two to three paragraph reaction to the VALUES AND GOALS: A WAY TO GO film. Describe the character in the film to whom you best relate including your common map elements, values, motivators, attitudes, etc.	5 points
	15.	Keep a weekly diary for 10 weeks during the H. P. Seminar which reflects your sharing experiences in IDS 101 with others (family, boyfriends, peers, parents, etc.). Include each person's reaction to your cognitive map, values, motivators, strengths, goals, etc.	10 points MAXIMUM
	16.	Compose a picture or symbol collage of "Your Self Concept," "My Life Goals," "The Me Nobody Knows," etc. Choose your own topic. Be original!!!	5 points
	17.	Read any books on the IDS 101 Book List and give (1) a two page written report or (2) a 5 minute oral report or (3) lead a small group discussion on the main points.	5 points for each book
	18.	Construct a test on any unit of one of your classes illustrating how you prefer to respond to material. Examples: True/False, Multiple Choice, Compare-Contrast Essay, Relationship Matching, etc.	10 points MAXIMUM

APPENDIX N (continued)

19. Construct a road map (use your imagination) illustrating your short and long range goals; include map symbols, motivators, values, strengths, etc. necessay to attain each goal. Include career, personal, familial, social, etc. goals. BE REALISTIC. 5 points

20. Participate in a totally new experience---perhaps something you always wanted to do, etc. Write up your reactions, emphasizing the feelings and perceptions you encounter. 5 points

APPENDIX O

WAGS TESTING SCHEDULE

POLK COMMUNITY COLLEGE
WAGS TESTING SCHEDULE
EDUCATIONAL SCIENCES
AUGUST 28, 1974

SEQUENCE	TEST NUMBER	TEST MODE	AREA TESTED	MATERIALS NEEDED	TIME NEEDED
1	I	Written	Verbal	IBM Card	15 min.
2	III	Written	Math	IBM Card	15 min.
3	IV	Written	Reading	IBM Card	20 min.
			BREAK		
4	II	Tape	Listening	Answer Sheet	10 min.
5	V	Tape	Math	Answer Sheet	10 min.
6	Test Q (V)	Slides	Visual	Answer Sheet	10 min.
7	Test Q (A)	Tape	Auditory	Answer Sheet	10 min.
			BREAK		
8	VI	Written	English	IBM Card	40 min.
		COLLECT TIMED BOOKS HAND OUT UNTIMED BOOKS			
9	X	Written	Problem solving, reaching conclusions, and decision-making.	IBM Card	
10	IX	Written		IBM Card	
11	VIII	Written		IBM Card	
12	VII	Written		IBM Card	
13	Sniff Test	Scratch Cards	Olfactory	Answer Sheet	
			BREAK		
14	Nelson-Denny		Reading	Answer Sheet	

APPENDIX P

PRESCRIPTION ACTIVITIES FOR BURSTING

POLK COMMUNITY COLLEGE WAGS PROGRAM
PRESCRIPTION ACTIVITIES FOR BURSTING

INDIVIDUALIZED ACTIVITIES

Individualized packets
Independent research
Programmed texts
Programmed units
Programmed materials
Individual conference
Tutors

AUDITORY ACTIVITIES

Audio tapes
Cassettes with lectures
Audio notebooks
Records
Math concept tapes

GROUP ACTIVITIES

Resource people
Seminars
Lectures
Large group sessions
Small group sessions
Rap sessions
Mini courses

VISUAL ACTIVITIES

Filmstrips
Filmloops
Slides
Microfilm
Video-taped lectures

READING ACTIVITIES

Reading eye camera
Programmed reading machine
Tachistoscope
Language master
Controlled readers
Shadowscope

TACTILE AND VISUAL ACTIVITIES

Three-dimensional models
Auto-tutor
Mast machine
Manipulation materials
Games

APPENDIX Q

STUDENT EVALUATION QUESTIONNAIRE

POLK COMMUNITY COLLEGE WAGS PROGRAM
STUDENT EVALUATION QUESTIONNAIRE

INSTRUCTIONS:

You are being asked to help in the evaluation of the WAGS Program. Your responses will be used to make decisions concerning the future of this Program. Please be honest.

PLEASE PLACE ANSWERS ON THE ANSWER SHEET PROVIDED.

PLEASE USE BLACK NO. 2 PENCIL.

PLEASE DO NOT PLACE YOUR NAME OR SOCIAL SECURITY NUMBER ON THE ANSWER SHEET.

IF YOU CHANGE ANY RESPONSE, MAKE SURE THAT YOU COMPLETELY ERASE THE WRONG RESPONSE.

PLEASE INDICATE YOUR RESPONSE TO EACH OF THE FOLLOWING 50 STATEMENTS BY BLACKENING THE SPACE WHICH MOST NEARLY EXPRESSES YOUR OPINION, ACCORDING TO THE FOLLOWING CRITERIA:

Item A if you STRONGLY DISAGREE with the statement.

Item B if you DISAGREE with the statement.

Item C if you NEITHER AGREE NOR DISAGREE with the statement.

Item D if you AGREE with the statement.

Item E if you STRONGLY AGREE with the statement.

1. I have become a more competent person due to the WAGS Program.
2. Good use of class time was made in all courses in the Program.
3. Material in all classes were presented in a clear and interesting manner.
4. My map was utilized effectively in class assignments.
5. I found my map to be very useful in better understanding myself.
6. Objectives for each course were explained adequately to me.
7. PCC staff members working with me in the WAGS Program showed understanding and sympathy for problems related to me.
8. The instructors in the WAGS Program demonstrated a thorough knowledge of their subject matter.
9. The WAGS Program better motivated me to work to my capacity.
10. The Human Potential Seminar sessions helped me develop self confidence.
11. My skills were improved in note-taking, listening, etc.
12. The individualized system of instruction was beneficial to me.
13. The balance between lecture, group discussions, and individual study was sufficient.
14. I enjoyed being a part of the WAGS Program.
15. I was given ample opportunity to participate in each class.

APPENDIX Q (continued)

16. I was challenged intellectually in all courses.
17. WAGS instructors are fair and honest in grading practices.
18. I would recommend the WAGS Program to a friend.
19. The Human Potential sessions helped me to know others and understand myself.
20. More courses should be taught this way
21. The textbooks used in WAGS courses were appropriate.
22. Generally the WAGS Program was well organized.
23. The Human Potential sessions helped me develop an attitude of friendliness.
24. I was encouraged to express opinions in all my WAGS courses.
25. The Human Potential Seminar enabled me to define my values.
26. The PCC staff working with the WAGS Program seemed to be interested in me as a person.
27. I received adequate personal counseling.
28. The WAGS Program stimulated my interest in learning.
29. The proper emphasis was placed on examinations and grades in WAGS classes.
30. The objectives for each WAGS course were clear.
31. The appropriate amount of emphasis was placed on career planning.
32. Career planning sessions caused me to think seriously about my future plans.
33. Generally the student map helped me understand my learning style.
34. The teaching methods used were appropriate for this Program.
35. Student participation is important in a course.
36. My student map encouraged me to look at alternate ways of learning.
37. Help from the WAGS staff outside of class was available.
38. The pace of the courses in general was appropriate.
39. The career planning portions of the WAGS Program were generally beneficial to me.
40. The subject matter, methods, and skills learned will be useful.
41. The terminology used to explain my map was helpful.
42. I was encouraged to work independently.
43. Materials presented in classes, with respect to course objectives, were relevant.
44. The Human Potential Seminar sessions helped me adjust to college life.
45. As a result of the career planning sessions, I have decided on a program to follow.
46. The WAGS subject matter presented was up-to-date.
47. The WAGS Program would be good for all entering freshmen.
48. The Human Potential Seminar sessions should remain a part of the WAGS Program.
49. Student mapping should remain a part of the WAGS Program.
50. The career planning sessions should remain a part of the WAGS Program.

ON THE BACK SIDE OF THE ANSWER SHEET FEEL FREE TO WRITE ANY COMMENTS, CRITICISMS, OR SUGGESTIONS THAT YOU MIGHT HAVE.

BIBLIOGRAPHY

BIBLIOGRAPHY

Anderson, Camilla. "self-Image: A Theory of the Dynamics of Behavior Updated," *Mental Hygiene*, 55:367, July, 1971.

Association for Supervision and Curriculum Development. *Leadership for Improving Instruction*. 1960 Yearbook. Washington: National Education Association, 1960.

Ausubel, David. *The Psychology of Meaningful Verbal Learning*. New York: Greene and Statton, 1963.

Beatty, Walcott H., ed. *Improving Educational Assessment and an Inventory of Measures of Affective Behavior*. Washington: National Education Association, 1971.

Blanchard, Kenneth H., and Paul Hersey. "Leadership Theory for Educational Administrators," *Education*, 90:303, April, 1970.

Bloom, Benjamin S., and others. *Taxonomy of Educational Objectives*. New York: David McKay Company, Inc., 1969.

Borg, Walter R., and Meredith D. Gall. *Educational Research: An Introduction*. New York: David McKay Company, Inc., 1971.

Brown, Ray E. "How Good Administrators Get That Way," *The Nations Schools*, 71:49, June, 1973.

Bruner, Jerome S. "Liberal Education for all Youth," *Education Digest*, 31:6, February, 1966.

________. *The Process of Education*. Cambridge: Harvard University Press, 1962.

________. *The Relevance of Education*. New York: W.W. Norton and Company, 1973.

Burns, Donald C. "Community Career Development Center," *Community and Junior College Journal*, 44:11, May, 1974.

Burns, Richard W., and Gary D. Brooks, eds. *Curriculum Design in a Changing Society*. Englewood Cliffs: Educational Technology Publications, 1970.

Bushnell, David S. *Organizing for Change: New Priorities for Community Colleges* New York: McGraw-Hill Book Company, 1973.

Carnegie Foundation for the Advancement of Teaching. Commission on Higher Education. *The Open-Door Colleges: Policies for Community Colleges*. Special report. New York: McGraw-Hill Book Company, 1970.

Clegg, Alec. "What Is a Humanizing Curriculum?," *National Elementary Principals*, 49:12, February, 1970.

Cohen, Arthur M. *Dateline '79: Heretical Concepts for the Community College*. Beverly Hills: Glencoe Press, 1969.

________ and others. *A Constant Variable*. San Francisco: Jossey-Bass, Inc., Publishers, 1971.

Collins, Charles C. *College Orientation: Education for Relevance*. Boston: Holbrook Press, Inc., 1970.

Combs, Arthur. "New Concepts of Human Potentials: New Challenge for Teachers," *Childhood Education*, 47:352, April, 1971.

Dees, James. *The Psychology of Learning*. New York: McGraw-Hill Book Company, 1958.

Dressel, Paul L. *College and University Curriculum*. Berkely: McCutchan Publishing Corp., 1971.

Elkind, David. "Increasing and Releasing Human Potentials," *Childhood Education*, 47:347, April, 1971.

Elliott, Arthur. "Student Tutoring Benefits Everyone," *Phi Delta Kappan*, 54:536, April, 1973.

Fitts, William H., and others. *The Self Concept and Self-Actualization*. Nashville: Counselor Recordings and Tests, 1971.

Flanagan, John C. "How Instructional Systems Will Manage Learning," *Nations Schools*, 86:68, October, 1970.

Flynn, John M. *Learning Theory and Applications*. Ft. Lauderdale: Nova University, 1973.

Foshay, Arthur W. *Curriculum for the 70's: Agenda for Invention*. U. S., Educational Resources Information Center, ERIC Document ED 053 075, September, 1970.

Franseth, Jane. *Supervision as Leadership*. Evanston: Row, Peterson and Company, 1961.

Gilliland, J. Richard. "Maximizing Student Success," *Community and Junior College Journal*, 44:13, March, 1974.

Gleazer, Edmund J., Jr. *This is the Community College*. New York: Houghton Mifflin Company, 1968.

Gotkin, Lassar. "Cognitive Development and the Issue of Individual Differences," Programmed Instruction, 4:1, October, 1971.

Greenberg, Herbert. Teaching with Feeling. New York: The Macmillan Company, 1969.

Griffiths, Daniel E. Administrative Theory. New York: Appleton-Century-Crofts, 1959.

Hampton, William. "Students Find Their Way to Learning With Cognitive Style Mapping," College and University Business, 52:10, February, 1972.

Harris, James A. "Drastic Proposals for Educational Improvements," Today's Education, 63:5, November-December, 1974.

Havelock, Ronald G. The Change Agent's Guide to Innovation in Education. Englewood Cliffs: Educational Technology Publications, 1973.

Havighurst, Robert J. "Curriculum for the Disadvantaged," Phi Delta Kappan, 51:373, March, 1970.

Henderson, Algo D. The Innovative Spirit. San Francisco: Jossey-Bass, Inc., Publishers, 1970.

Herrick, Virgil E. "Approaches to Helping Teachers Improve Their Instructional Practices," School Review, p. 527, December, 1954.

________, and others. "Administrative Structures and Processes in Curriculum Development," Review of Educational Research, 30:258, June, 1960.

Hilgard, Ernest R., and Gordon H. Bower. Theories of Learning. New York: Appleton-Century-Crofts, 1966.

Hill, Joseph E. An Outline of the Educational Sciences: A Conceptual Framework. Bloomfield Hills: Oakland Community College Press, 1969.

________. The Educational Sciences. Bloomfield Hills: Oakland Community College Press, 1974.

________, and Derek N. Nunney. "Career Mobility Through Personalized Occupational Education," American Vocational Journal, rpt., October, 1971.

________, and Derek N. Nunney. "Personalized Educational Program," Audiovisual Instruction, 17:10, February, 1972.

Houle, Cyril O. The Inquiring Mind. Madison: The University of Wisconsin Press, 1961.

Jellema, William W., ed. Efficient College Management. San Francisco: Jossey-Bass Inc., Publishers, 1972.

Johnson, B. Lamar. Islands of Innovation Expanding. Beverly Hills: Glenco Press, 1969.

LaBenne, Wallace D., and Bert Greene. Educational Implications of Self-Concept Theory. Palisades: Goodyear Publishing Co., 1969.

LaPlante, William A. "Real Reform Still Needed on Individualization," Nations Schools, 87:64, February, 1971.

Lahti, Robert E. "Improving Performance Appraisals," Community and Junior College Journal, 45:8, March, 1975.

_______. Innovative College Management. San Francisco: Jossey-Bass Inc., Publishers, 1973.

Likert, Rensis. New Patterns of Management. New York: McGraw-Hill Book Co., 1961.

_______. The Human Organization: Its Management and Value. New York: McGraw-Hill Book Co., 1967.

Logan, Frank A. Fundamentals of Learning and Motivation. Dubuque: Wm. C. Brown Co., 1970.

McHolland, James D. Every Student is a Gifted Student. U.S., Educational Resources Information Center, ERIC Document ED 030 927, November, 1969.

_______. Human Potential Seminars: An Approach to Turning on the Gifted Underachiever. U.S., Educational Resources Information Center, ERIC Document ED 047 349, February, 1971.

_______. Human Potential Seminars: Leader's Manual. Evanston: Kendall College Press, 1972.

_______. The Release of Human Potential Through Human Encounter. U.S., Educational Resources Information Center, ERIC Document ED 030 926, March, 1969.

_______, and Roy W. Trueblood. Human Potential Seminars: Participant's Workbook. Evanston: Kendall College Press, 1972.

_______, and Roy W. Trueblood. Self-Actualization and the Human Potential Group Process. U.S., Educational Resources Information Center, ERIC Document ED 055 295, January, 1972.

Marland, S. P., Jr. "Career Education and the Two-Year Colleges," American Education, 8:11, March, 1972.

Maslow, Abraham H. Motivation and Personality. New York: Harper and Row, Publishers, 1970.

________. Religions, Values, and Peak-Experiences. New York: The Viking Press, 1972.

________. The Farther Reaches of Human Nature. New York: The Viking Press, 1971.

Matson, Jane. Emerging Trends in Junior College Student Personnel Work. U.S., Educational Resources Information Center, ERIC Document ED 021 255, April, 1968.

Medsker, Leland L., and Dale Tillery. Breaking the Access Barriers: A Profile of Two-Year Colleges. New York: McGraw-Hill Book Co., 1971.

Meyer, Donald L. Educational Statistics. New York: The Center for Applied Research in Education, Inc., 1967.

Michael, Donald N. On Learning to Plan--and Planning to Learn. San Francisco: Jossey-Bass, Inc., Publishers, 1973.

Milton, Ohmer. Alternatives to the Traditional. San Francisco: Jossey-Bass, Inc., Publishers, 1972.

Mood, Alexander M. The Future of Higher Education. New York: McGraw-Hill Book Co., 1973.

Naiman, Arnold, and others. Understanding Statistics. New York: McGraw-Hill Book Co., 1972.

Newman, William H. Administrative Action: The Techniques of Organization and Management. Englewood Cliffs: Prentice-Hall, Inc., 1956.

Nunney, Derek N., and Joseph E. Hill. "Personalized Educational Programs." Unpublished manuscript, Oakland Community College, 1974.

O'Banion, Terry. "Student Personnel Work: An Emerging Model," Community and Junior College Journal, 41:6-14, November, 1970.

________, and Alice Thurston, eds. Student Development Programs in the Community Junior College. Englewood Cliffs: Prentice-Hall, Inc., 1972.

Otto, Herbert A. Exploration in Human Potentials. Springfield: Charles C. Thomas, Publishers, 1966.

Petty, Gary F. "A Practical Look at Management Personnel Development," Community and Junior College Journal, 45:16, August-September, 1974.

Phillips, Ellis L., Jr. "Toward More Effective Administration in Higher Education," The Educational Record, 47:149, Spring, 1966.

Pitcher, Robert W., and Babette Blaushild. Why College Students Fail. New York: Funk and Wagnalls, 1970.

Popham, W. James, and Eva L. Baker. Systematic Instruction. Englewood Cliffs: Prentice-Hall, Inc., 1970.

Preus, Paul K., and Jerol B. Swaim. "Open-Doors For Reverse Transfer Students," Community and Junior College Journal, 44:28, February, 1974.

Purkey, William W. "The Self and Academic Achievement," Research Bulletin, Published by the Florida Educational Research and Development Council, 3:15, Spring, 1967.

Radike, Floyd W., ed. Handbook for Teacher Improvement Utilizing the Educational Sciences. Bloomfield Hills: American Educational Sciences Association, 1973.

Rhetts, John E. "The Impact of Student Learning Style on Curriculum Assignment and Performance in the PLAN Program of Individualized Instruction," Education, 90:248-251, February, 1970.

Rogers, Carl R., and Barry Stevens. Person to Person: The Problems of Being Human. Lafayette: Real People Press, 1967.

Rogers, Everett M. Diffusion of Innovations. New York: The Free Press, 1967.

Rosenbaum, Peter. Peer-Mediated Instruction. New York: Teachers College Press, 1973.

Schultz, Raymond E. "Curriculum Trends and Directions in American Junior Colleges," Peabody Journal of Education, 48:266, July, 1971.

Setz, Betty. "Prescription for Personalized Education." Unpublished manuscript, Oakland Community College, 1971.

Skinner, B. F. "Teaching Machines," Science, 67:969, October, 1958.

________. The Technology of Teaching. New York: Appleton-Century-Crofts, 1968.

Stanley, Julian C., and Kenneth D. Hopkins. Educational and Psychological Measurement and Evaluation. Englewood Cliffs: Prentice-Hall, Inc., 1972.

Tannenbaun, Robert, and others. Leadership and Organization: A Behavioral Science Approach. New York: McGraw-Hill Book Co., 1961.

Thelen, Herbert A. "Tutoring by Students," The Education Digest, 35:19, February, 1970.

Tillery, Dale. "A College for Everyman," Ft. Lauderdale: Nova National Ed. D. Program, Junior College Governance, 1973. (Mimeographed.)

Tracz, George, and Wayne Burtnyk. "Educational Administration, Planning, and Management," Education Canada, 12:45, March, 1972.

Travers, Robert M. Essentials of Learning. New York: The Macmillan Co., 1972.

Trotter, Robert. "Self-Image," Science News, 100:130, August, 1971.

Trueblood, Roy W. "Group Psychotherapy, T-Groups and Human Potential Seminars--A Comparison." Unpublished paper, Kendall College, 1969.

Tuckman, Bruce W., and Keith J. Edwards. "A Systems Model for Instructional Design and Management," Educational Technology, 11:21-26, September, 1971.

Tunks, Roger. "Classroom Strategies for Success with Packages," Journal of Secondary Education, 46:210, May, 1971.

Warner, James L. "An Analysis of the Cognitive Styles of Students Utilizing Different Modes of Instruction." Unpublished manuscript, Oakland Community College, 1971.

Watson, James. "I'm Just Plain Dumb--How to Change Negative Self-Concepts in Low-Ability Children," Todays Education, 62:26, March, 1973.

Wattenbarger, James L. "Community College Curriculum: Establishing and Implementing Institutional Objectives," Peabody Journal of Education, 51:107, January, 1974.

Webster, William, and Gordon K. McLeod. "An Empirical Approach to Curriculum Design," Education, 90:252, February, 1970.

Wilson, S. R., and D. T. Tosti. Learning is Getting Easier. San Rafael: Individualized Learning Systems, Inc., 1972.

Woods, Thomas E. The Administration of Educational Innovation. U.S., Educational Resources Information Center, ERIC Document ED 043 314, May, 1967.

Wynn, Richard. Unconventional Methods and Materials for Preparing Educational Administrators. Commissioned by ERIC Clearinghouse on Educational Management. Published by University Council for Educational Administrators, 1972.

Venn, Grant. Man Education and Work. Washington: American Council on Education, 1964.

AUTOBIOGRAPHICAL SKETCH

Owen M. Lee, Jr. was born February 16, 1932, in Pell City, Alabama. In June, 1950, he was graduated from Pell City High School. He attended Auburn University where he received the Bachelor of Science degree with major in Agricultural Education in 1953 and the Master of Science degree in 1955.

He attended the University of Georgia where he received the Master of Education degree in Science Education in 1960 and the Specialist in Education degree in 1971. While attending the University of Georgia he was awarded a National Science Foundation Scholarship.

From 1953 to 1955 he taught in the St. Clair County school system at Pell City, Alabama. From 1955 to 1957 he taught and was principal in the Shelby County school system at Vincent, Alabama. In 1957 he moved to Winter Haven, Florida where he taught in the Polk County school system until 1962. From 1962 until 1964 he was employed by WEDU Educational Television as a science instructor. From 1964 to the present he has been employed at Polk Community College in an administrative position.

Owen M. Lee, Jr. and his wife, the former Ruth Harris, have two children, Rhonda and Travis.

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 16 1976

CLEARINGHOUSE FOR
JUNIOR COLLEGES